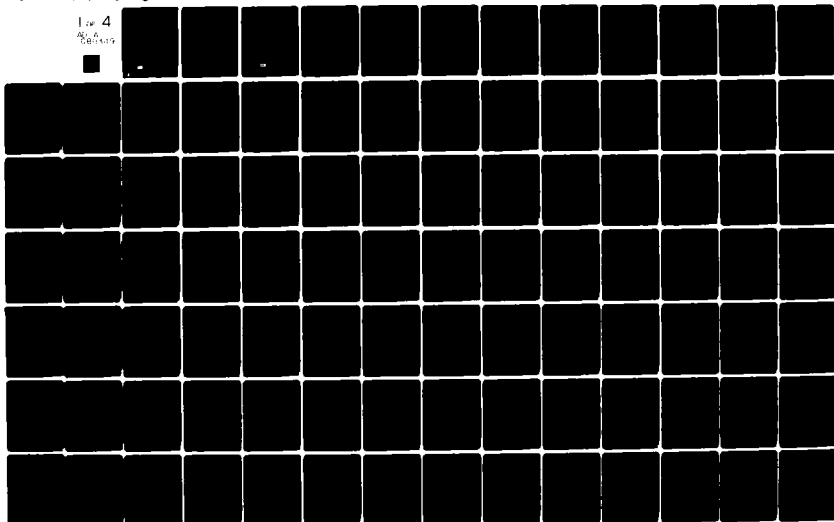


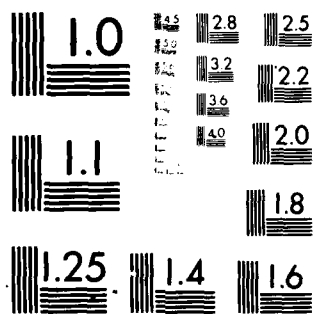
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**THE EFFECTIVENESS OF  
INFORMATION PROCESSING  
IN JUMPS/MMS. Volume II.**

Appendices D-E

10 Maj. Charles A. Millard USMC  
Patricia M. Buckley

15 NPP414-76-C-p746

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CRC 404-Vol. II / October 1979

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# THE EFFECTIVENESS OF INFORMATION PROCESSING IN JUMPS/MMS

Appendices D-E

Maj. Charles A. Millard, USMC  
Patricia M. Buckley



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APPENDIX D  
DETAILED RESULTS

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## APPENDIX D

### DETAILED RESULTS

This appendix contains the detailed results of our analysis for both MMS and JUMPS. The results are displayed by data group, as described in table 5 of the main text. For each of the data groups, results are given that are comparable to those in tables 8 through 14 of the main text. The JUMPS results in the main text, however, assume that the TODEs/DTLs that are processed decentrally are sent to MCFC, Kansas City by AUTODIN (with a one day delay), whereas the TODEs/DTLs that are centrally processed are mailed. The tables in this appendix assume that all TODEs/DTLs are mailed to Kansas City. These results, therefore, show longer overall times.

For the basic sampling units (i.e., data groups 1 through 22), cumulative distributions of the initial times are given. Also included for each group are the conditional transition probabilities and times. The transition states (i.e., the entries in the "Transition" columns) correspond to those defined in appendix B. Since all transition probabilities have been rounded to three significant figures, their sum at any given processing point may deviate slightly from unity.

Confidence limits are calculated at a significance level of 0.05 (i.e., at the 95-percent confidence level) by the method described in appendix E. Annex D-6 contains the percentile values of the student's t-distribution; these values were used in the calculation of the confidence intervals. Two-sided intervals are given wherever possible -- that is, where the calculated interval did not include a negative time or a probability outside the range from zero to unity. If the symbol "<" appears in either confidence limit column, the appropriate one-sided upper or lower limit is given.

Tab D-5-2 contains the matrices and vectors that completely describe the JUMPS/MMS performance of the total sample, data group 29. Appendix E describes the method of calculation of the matrices and vectors. Tables D-138 through D-145 contain the MMS matrices and vectors, while those for JUMPS are contained in tables D-146 through D-153.

ANNEX D-1

DETAILED RESULTS FOR DATA GROUPS 1 THROUGH 6

ANNEX D-1

DETAILED RESULTS FOR DATA GROUPS 1 THROUGH 6

This annex contains the detailed results of our analysis of information processing in JUMPS/MMS for the following data groups:

<u>Group</u>	<u>Unit</u>	<u>DSSN</u>	<u>SDPI</u>
1	MCB, Camp Lejeune	5190	02
2	Second FSSG	6092	02
3	Second Marines	6092	02
4	Sixth Marines	6092	02
5	Eighth Marines	6092	02
6	Tenth Marines	6092	02



TABLE D-1

MMS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group					
	1	2	3	4	5	6
Event not reported						
Unrestricted	0.026	0.000	0.000	0.000	0.000	0.000
Restricted	0.130	0.086	0.040	0.162	0.099	0.028
Primary distribution of reported events						
Accepted - passed to KC in UTR para. 1/7	0.871	0.919	0.918	0.949	0.860	0.874
Rejected to RU in UTR para. 2/6	0.013	0.005	0.013	0.013	0.009	0.013
Rejected to ACU	0.050	0.027	0.034	0.017	0.070	0.071
Deleted (UTR para. 4)	0.002	0.003	0.004	0.001	0.003	0.000
Advisory message (UTR para. 5)	0.006	0.002	0.009	0.001	0.009	0.003
Suspense file	0.045	0.036	0.013	0.014	0.043	0.027
ACU/SDPI loss	0.013	0.008	0.009	0.005	0.006	0.012
UTR para. 2/6 entry not resubmitted	0.110	0.017	0.027	0.024	0.025	0.018
UTR para. 5 entry not resubmitted	0.310	0.085	0.105	0.215	0.163	0.038
CDPA/MCFC edit - poster failures						
Edit failures	0.001	0.001	0.001	0.001	0.001	0.001
Poster failures	0.034	0.034	0.034	0.034	0.034	0.034

TABLE D-2  
MMS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

Outcome	Group					
	1	2	3	4	5	6
Event not reported	0.026	0.000	0.000	0.000	0.000	0.000
UTR para. 2/6 entry - not corrected	0.002	0.000	0.000	0.000	0.000	0.000
UTR para. 5 entry - not corrected	0.003	0.000	0.001	0.001	0.001	0.001
Rejected to RU - no action required	0.006	0.004	0.011	0.002	0.005	0.005
UTR para. 4 entry	0.003	0.003	0.005	0.001	0.004	0.000
Scanner reject - not corrected	0.000	0.000	0.000	0.000	0.000	0.000
Edit reject - not corrected	0.001	0.000	0.001	0.000	0.000	0.001
Lost in edit	0.013	0.008	0.009	0.005	0.006	0.010
Rejected to ACU - no action required	0.014	0.008	0.010	0.005	0.005	0.011
Lost in suspense file	0.000	0.000	0.000	0.000	0.000	0.000
Posted to CMR	0.925	0.974	0.956	0.976	0.903	0.949

TABLE D-3  
MMS TIMES (DAYS) FOR SELECTED TRANSITIONS

Transition	Group					
	1	2	3	4	5	6
From event to Unit Diary						
Unrestricted	22.63	7.17	13.40	27.96	22.94	9.59
Restricted	11.21	3.87	9.07	9.68	9.08	7.05
From UD to ACU scanning	3.54	2.81	2.61	2.34	3.56	2.57
From ACU scan to UTR	0.48	0.48	0.48	0.48	0.48	0.48
From UTR para. 2/6 to RU						
resubmission	3.31	5.35	5.89	4.82	5.79	7.25
From UTR para. 5 to RU						
resubmission	9.76	6.77	20.16	9.62	15.57	7.66
From suspense file to suspense file						
From rejection to ACU to ACU	8.85	7.95	12.77	8.76	8.13	9.15
resubmission	1.73	1.73	1.73	1.73	1.73	1.73
From rejection to ACU to AUTODIN						
entry	5.38	5.32	5.54	5.40	5.52	5.31
From ACU scan to CDPA edit	3.82	3.54	3.49	3.35	3.52	3.32
From AUTODIN entry to CDPA edit	2.64	2.64	2.64	2.64	2.64	2.64
From CDPA receipt to CMR posting	1.71	1.71	1.71	1.71	1.71	1.71
Event occurrence to CMR posting	32.18	15.45	21.70	35.84	32.22	17.20

TABLE D-4  
CUMULATIVE PROBABILITY DISTRIBUTION OF MMS TIMES  
FOR TRANSITION FROM EVENT TO UNIT DIARY

Time (days)	Group					
	1	2	3	4	5	6
0	0.142	0.278	0.169	0.213	0.151	0.262
1	0.225	0.429	0.278	0.298	0.328	0.420
2	0.287	0.535	0.350	0.356	0.399	0.490
3	0.359	0.601	0.431	0.425	0.437	0.582
4	0.406	0.672	0.496	0.486	0.470	0.612
5	0.447	0.767	0.547	0.498	0.514	0.684
6	0.495	0.808	0.618	0.524	0.554	0.700
7	0.528	0.822	0.646	0.546	0.603	0.722
8	0.559	0.839	0.677	0.590	0.627	0.744
10	0.614	0.857	0.709	0.632	0.663	0.776
15	0.678	0.916	0.776	0.679	0.736	0.822
20	0.720	0.927	0.827	0.702	0.772	0.868
30	0.775	0.938	0.886	0.724	0.818	0.906
40	0.829	0.945	0.923	0.781	0.860	0.946
50	0.882	0.947	0.943	0.816	0.882	0.966
75	0.920	0.993	0.970	0.883	0.920	0.982
100	0.946	0.996	0.980	0.908	0.936	0.992
125	0.969	0.998	0.986	0.924	0.951	0.996
156	0.981	1.000	0.994	0.971	0.965	0.998
204	0.988	--	0.996	0.987	0.973	1.000
269	0.996	--	1.000	0.997	0.989	--
286	1.000	--	--	0.987	0.998	--
288	--	--	--	0.997	1.000	--
317	--	--	--	1.000	--	--

TABLE D-5

JUMPS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group					
	1	2	3	4	5	6
Primary separation						
ABA event	0.719	0.660	0.391	0.563	0.621	0.771
TODE event	0.281	0.340	0.609	0.438	0.379	0.229
ABA event not reported	0.000	0.000	0.000	0.000	0.000	0.000
ABA lost at DO	0.000	0.000	0.000	0.000	0.000	0.000
ABA decentrally processed	1.000	1.000	1.000	1.000	1.000	1.000
ABA read by scanner	0.919	0.833	0.833	0.833	0.833	0.833
ABA scanner rejects lost	0.351	0.377	0.377	0.377	0.377	0.377
TODE event not reported	0.007	0.000	0.000	0.000	0.000	0.009
TODE document lost at DO	0.000	0.108	0.108	0.108	0.108	0.108
TODE lost at DO	0.208	0.108	0.108	0.108	0.108	0.108
TODE decentrally processed	1.000	1.000	1.000	1.000	1.000	1.000
TODE read by scanner	0.919	0.896	0.896	0.896	0.896	0.896
TODE scanner rejects lost	0.056	0.000	0.000	0.000	0.000	0.000
MCFC scanner rejects of ABA	0.078	0.078	0.078	0.078	0.078	0.078
MCFC posting failure for ABA	0.041	0.041	0.041	0.041	0.041	0.041
MCFC scanner reject of TODE	0.018	0.018	0.018	0.018	0.018	0.018
MCFC posting failure for TODE	0.034	0.034	0.034	0.034	0.034	0.034

TABLE D-6  
JUMPS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

Outcome	Group					
	1	2	3	4	5	6
ABA event not reported	0.000	0.000	0.000	0.000	0.000	0.000
ABA lost at DO	0.083	0.133	0.133	0.133	0.133	0.133
ABA rejected at MCFC - not resubmitted	0.000	0.004	0.004	0.004	0.004	0.004
TODE event not reported	0.007	0.000	0.000	0.000	0.000	0.000
TODE document lost at RU	0.162	0.000	0.000	0.000	0.000	0.000
TODE document lost at DO	0.000	0.108	0.108	0.108	0.108	0.108
TODE lost at DO	0.173	0.096	0.096	0.096	0.096	0.096
TODE rejected at ACU - lost	0.003	0.000	0.000	0.000	0.000	0.000
TODE rejected at MCFC - lost	0.000	0.000	0.000	0.000	0.000	0.000
ABA posted to MMPA	0.917	0.894	0.623	0.894	0.894	0.894
TODE posted to MMPA	0.655	0.823	0.796	0.796	0.796	0.789

TABLE D-7  
JUMPS TIMES (DAYS) FOR SELECTED ABA TRANSITIONS

Transition	Group					
	1	2	3	4	5	6
From ABA event to ABA Unrestricted	1.73	0.68	0.85	1.47	0.77	0.40
Restricted	1.73	0.68	0.85	0.83	0.77	0.40
From ABA preparation to receipt at DO	0.83	1.24	1.24	1.24	1.24	1.24
From ABA receipt at DO to DTL	6.40	8.24	8.24	8.24	8.24	8.24
From DTL preparation to decentral scan	0.15	0.00	0.00	0.00	0.00	0.00
From decentral scan to mailing	1.35	2.34	2.34	2.34	2.34	2.34
From DTL preparation to mailing	3.03	4.41	4.41	4.41	4.41	4.41
From ABA receipt at MCFC to central scan	0.64	0.64	0.64	0.64	0.64	0.64
From central scan to posting to MMPA	0.00	0.00	0.00	0.00	0.00	0.00
From receipt at MCFC to posting	1.26	1.26	1.26	1.26	1.26	1.26
From ABA event to posting to MMPA	16.16	18.73	17.66	19.52	18.83	18.46

TABLE D-8  
JUMPS TIMES (DAYS) FOR SELECTED TODÉ TRANSITIONS

Transition	Group					
	1	2	3	4	5	6
From TODÉ event to TODÉ document						
Unrestricted	23.19	26.84	34.83	41.96	21.84	30.22
Restricted	14.16	11.56	15.93	17.92	12.04	14.72
From TODÉ document preparation to receipt at DO	8.07	10.30	10.79	6.54	8.70	16.27
From document receipt at DO to TODÉ	9.68	4.26	4.26	4.26	4.26	4.26
From TODÉ to DTL preparation	2.14	4.25	4.25	4.25	4.25	4.25
From DTL preparation to decentral scan	0.03	0.00	0.00	0.00	0.00	0.00
From decentral scan to mailing	1.32	3.02	3.02	3.02	3.02	3.02
From DTL preparation to mailing	5.16	5.07	5.07	5.07	5.07	5.07
From TODÉ receipt at MCFC to central scan	1.06	1.06	1.06	1.06	1.06	1.06
From central scan to posting to MMPA	0.01	0.01	0.01	0.01	0.01	0.01
From receipt at MCFC to posting to MMPA	1.40	1.40	1.40	1.40	1.40	1.40
From TODÉ event to posting to MMPA	53.79	40.49	64.77	67.64	49.89	65.63



TABLE D-9  
CUMULATIVE PROBABILITY DISTRIBUTION OF JUMPS  
TIMES FOR TRANSITION FROM ABA EVENT TO ABA

Time (days)	Group					
	1	2	3	4	5	6
0	0.663	0.832	0.791	0.744	0.786	0.850
1	0.737	0.886	0.898	0.872	0.895	0.937
2	0.773	0.914	0.929	0.906	0.911	0.963
3	0.813	0.937	0.939	0.939	0.934	0.969
4	0.861	0.946	0.959	0.939	0.941	0.976
5	0.895	0.956	0.964	0.950	0.951	0.976
6	0.929	0.968	0.964	0.967	0.954	0.982
7	0.960	0.971	0.969	0.967	0.970	0.987
8	0.975	0.981	0.974	0.978	0.974	0.987
9	0.977	0.984	0.980	0.978	0.990	0.992
10	0.983	0.987	0.980	0.978	0.990	0.995
11	0.986	0.987	0.980	0.989	0.990	0.995
14	0.992	0.994	0.990	0.989	0.990	1.000
15	0.992	1.000	0.990	0.989	0.990	--
20	0.992	--	0.995	0.989	1.000	--
40	0.994	--	1.000	0.994	--	--
52	1.000	--	--	0.994	--	--
116	--	--	--	1.000	--	--

TABLE D-10  
CUMULATIVE PROBABILITY DISTRIBUTION OF JUMPS TIMES  
FOR TRANSITION FROM TODE EVENT TO TODE DOCUMENT

Time (days)	Group					
	1	2	3	4	5	6
0	0.152	0.117	0.096	0.052	0.154	0.045
1	0.196	0.167	0.144	0.112	0.239	0.055
2	0.232	0.191	0.181	0.142	0.277	0.082
3	0.297	0.259	0.226	0.157	0.319	0.118
4	0.355	0.327	0.263	0.179	0.351	0.145
5	0.370	0.364	0.285	0.209	0.388	0.182
6	0.399	0.389	0.326	0.231	0.410	0.218
7	0.420	0.401	0.356	0.254	0.436	0.255
8	0.442	0.414	0.378	0.284	0.452	0.282
10	0.507	0.488	0.422	0.343	0.516	0.373
15	0.580	0.580	0.515	0.410	0.628	0.518
20	0.696	0.722	0.589	0.522	0.707	0.645
30	0.768	0.809	0.689	0.634	0.793	0.782
40	0.862	0.852	0.752	0.701	0.835	0.818
50	0.906	0.877	0.785	0.754	0.872	0.836
75	0.942	0.901	0.859	0.806	0.931	0.909
100	0.964	0.938	0.896	0.873	0.957	0.927
125	0.971	0.951	0.930	0.910	0.979	0.936
194	0.978	0.969	0.974	0.970	1.000	0.991
262	0.993	0.994	1.000	0.985	--	0.991
274	0.993	1.000	--	0.993	--	0.991
296	1.000	--	--	0.993	--	0.991
338	--	--	--	1.000	--	0.991
346	--	--	--	--	--	1.000

TAB D-1-1

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA  
GROUP 1: MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

TABLE D-11

## GROUP 1 MMS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-1 <sup>a</sup>	M-2	0.974	500	0.960	0.988
	M-99	0.026	500	0.012	0.040
M-1 <sup>b</sup>	M-2	0.870	500	0.841	0.899
	M-99	0.130	500	0.101	0.159
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.772	154	0.705	0.839
	M-20	0.050	154	0.015	0.085
	M-30	0.013	154	<	0.028
	M-40	0.045	154	0.012	0.078
	M-50	0.006	154	<	0.016
	M-60	0.002	154	<	0.008
	M-70	0.013	154	<	0.028
	M-77	0.099	154	0.052	0.146
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.893	355	0.861	0.925
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.272	243	0.216	0.328
	M-20	0.058	243	0.028	0.088
	M-30	0.053	243	0.025	0.081
	M-40	0.012	243	<	0.024

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-11 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-17	M-50	0.066	243	0.035	0.097
	M-60	0.021	243	0.003	0.039
	M-70	0.012	243	<	0.024
	M-77	0.120	243	0.079	0.161
	M-81	0.385	243	0.324	0.447
M-18	M-7	0.476	83	0.367	0.535
	M-20	0.171	83	0.089	0.253
	M-30	0.000	83	<	0.002
	M-40	0.000	83	<	0.002
	M-50	0.121	83	0.050	0.192
	M-60	0.000	83	<	0.002
	M-70	0.073	83	0.016	0.128
	M-77	0.159	83	0.079	0.239
	M-81	0.000	83	<	0.002
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.083	301	0.052	0.114
	M-32	0.110	301	0.075	0.145
	M-33	0.807	301	0.762	0.852
M-40	M-7	0.325	334	0.784	0.866
	M-20	0.027	334	0.010	0.044
	M-30	0.003	334	<	0.008
	M-50	0.012	334	0.0003	0.0237
	M-60	0.009	334	<	0.018
	M-77	0.099	334	0.067	0.131
	M-80	0.000	334	<	0.001
	M-81	0.000	334	<	0.001
	M-83	0.024	334	0.008	0.040

TABLE D-11 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-50	M-51	0.516	478	0.471	0.561
	M-52	0.310	478	0.269	0.351
	M-53	0.174	478	0.140	0.208
M-54	M-55	0.024	83	<	0.052
	M-57	0.976	83	0.948	<

TABLE D-12  
GROUP 1 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	22.629	40.376	485	19.032	26.226
M-1 <sup>b</sup>	11.212	14.016	433	9.88	12.540
M-2	2.501	0.602	100	2.381	2.620
M-3	1.034	1.193	300	0.898	1.170
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.478	0.500	300	0.421	0.535
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	11.100	36.120	233	6.428	15.772
M-18	1.589	3.997	79	0.688	2.490
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	3.309	7.866	243	2.318	4.300
M-33	1.312	1.560	300	1.134	1.490
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	8.846	6.339	331	8.159	9.533
M-50	9.759	12.966	83	6.910	12.608
M-53	0.979	1.397	300	0.820	1.138
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-13

## GROUP 1 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.281	498	0.242	0.320
	J-50	0.719	498	0.680	0.758
J-10 <sup>a</sup>	J-11	0.007	140	<	0.019
	J-12	0.993	140	0.981	<
J-10 <sup>b</sup>	J-11	0.079	140	0.034	0.124
	J-12	0.921	140	0.876	0.966
J-12	J-13	0.163	184	0.109	0.217
	J-14	0.837	184	0.783	0.891
J-14	J-15	0.000	101	<	0.002
	J-16	1.000	101	0.998	<
J-16	J-17	0.208	101	0.128	0.288
	J-18	0.792	101	0.712	0.872
J-18	J-19	1.000	7,919	0.9997	<
	J-20	0.000	7,919	<	0.0003
J-21	J-22	0.000	7,919	<	0.0003
	J-23	0.919	7,919	0.913	0.925
	J-24	0.081	7,919	0.075	0.087
J-24	J-25	0.056	144	0.018	0.094
	J-26	0.944	144	0.906	0.982
J-29	J-30	0.000	7,919	<	0.0003
	J-34	1.000	7,919	0.9997	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time<sup>b</sup>Processing time restricted to 60 days or less.



TABLE D-13 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	358	<	0.001
	J-52	1.000	358	0.999	<
J-50 <sup>b</sup>	J-51	0.000	358	<	0.001
	J-52	1.000	358	0.999	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	0.000	7,565	<	0.0003
	J-58	1.000	7,565	0.9997	<
J-59	J-60	0.919	7,565	0.913	0.925
	J-61	0.081	7,565	0.075	0.087
	J-62	0.000	7,565	<	0.0003
J-62	J-63	0.351	168	0.278	0.424
	J-64	0.649	168	0.576	0.722
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.926
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.916	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-14  
GROUP 1 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	23.188	41.025	138	16.248	30.128
J-10 <sup>b</sup>	14.164	14.916	128	11.543	16.785
J-12	8.065	13.484	139	5.792	10.338
J-14	9.680	8.589	100	7.971	11.389
J-16	2.138	2.599	80	1.556	2.720
J-18	0.026	0.160	7,919	0.022	0.030
J-21	2.806	2.192	7,919	2.758	2.854
J-23	1.321	1.736	7,919	1.283	1.359
J-24	0.992	1.867	131	0.668	1.316
J-26	8.284	6.160	134	7.226	9.342
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	1.734	4.738	353	1.236	2.232
J-50 <sup>b</sup>	1.734	4.378	353	1.236	2.232
J-52	0.832	2.365	482	0.621	1.043
J-54	6.404	4.596	500	6.001	6.807
J-56	0.146	0.771	7,565	0.129	0.163
J-59	1.528	1.158	7,565	1.502	1.554
J-60	1.352	1.871	7,565	1.310	1.394
J-62	0.426	2.904	108	<	0.982
J-64	12.787	6.036	108	11.632	13.942
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-1-2

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA  
GROUP 2: SECOND FORCE SERVICE SUPPORT GROUP

TABLE D-15  
GROUP 2 MMS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-1 <sup>a</sup>	M-2	1.000	571	0.999	<
	M-99	0.000	571	<	0.001
M-1 <sup>b</sup>	M-2	0.914	571	0.891	0.937
	M-99	0.086	571	0.063	0.109
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.824	157	0.764	0.884
	M-20	0.027	157	0.002	0.052
	M-30	0.005	157	<	0.014
	M-40	0.036	157	0.007	0.065
	M-50	0.002	157	<	0.008
	M-60	0.003	157	<	0.010
	M-70	0.008	157	<	0.020
	M-77	0.095	157	0.049	0.141
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.893	355	0.861	0.925
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.688	422	0.644	0.732
	M-20	0.000	422	<	0.001
	M-30	0.000	422	<	0.001
	M-40	0.002	422	<	0.006
	M-50	0.072	422	0.047	0.097
	M-60	0.031	422	0.014	0.048
	M-70	0.007	422	0.0003	0.0137
	M-77	0.091	422	0.063	0.119
	M-81	0.110	422	0.080	0.140

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-15 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.851	47	0.747	0.955
	M-20	0.043	47	<	0.093
	M-30	0.000	47	<	0.003
	M-40	0.000	47	<	0.003
	M-50	0.085	47	0.003	0.167
	M-60	0.000	47	<	0.003
	M-70	0.000	47	<	0.003
	M-77	0.000	47	<	0.003
	M-81	0.021	47	<	0.056
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.077	466	0.053	0.101
	M-32	0.017	466	0.005	0.029
	M-33	0.906	466	0.879	0.933
M-40	M-7	0.962	427	0.944	0.980
	M-20	0.002	427	<	0.006
	M-30	0.000	427	<	0.001
	M-50	0.000	427	<	0.001
	M-60	0.002	427	<	0.006
	M-77	0.030	427	0.014	0.046
	M-80	0.002	427	<	0.006
	M-81	0.000	427	<	0.001
	M-83	0.002	427	<	0.006
M-50	M-51	0.807	436	0.770	0.844
	M-52	0.085	436	0.059	0.111
	M-53	0.108	436	0.079	0.137
M-54	M-55	0.043	47	<	0.093
	M-57	0.957	47	0.907	<

TABLE D-16  
GROUP 2 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	7.172	16.032	546	5.826	8.518
M-1 <sup>b</sup>	3.871	6.179	518	3.338	4.404
M-2	1.506	0.631	102	1.382	1.630
M-3	1.034	1.193	300	0.898	1.170
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.478	0.500	300	0.421	0.535
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.242	1.826	686	0.105	0.379
M-18	0.630	1.427	94	0.336	0.924
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	5.350	4.264	420	4.940	5.760
M-33	1.312	1.560	300	1.134	1.490
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	7.950	3.679	424	7.598	8.302
M-50	6.766	8.014	47	4.391	9.141
M-53	0.979	1.397	300	0.820	1.138
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-17

## GROUP 2 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.340	479	0.298	0.382
	J-50	0.660	479	0.618	0.702
J-10 <sup>a</sup>	J-11	0.000	163	<	0.001
	J-12	1.000	163	0.999	<
J-10 <sup>b</sup>	J-11	0.123	163	0.072	0.174
	J-12	0.877	163	0.826	0.928
J-12	J-13	0.000	169	<	0.001
	J-14	1.000	169	0.999	<
J-14	J-15	0.108	500	0.081	0.135
	J-16	0.892	500	0.865	0.919
J-16	J-17	0.108	500	0.081	0.135
	J-18	0.892	500	0.865	0.919
J-18	J-19	1.000	22,113	0.9998	<
	J-20	0.000	22,113	<	0.0002
J-21	J-22	0.000	22,113	<	0.0002
	J-23	0.896	22,113	0.892	0.900
	J-24	0.104	22,113	0.100	0.108
J-24	J-25	0.000	501	<	0.001
	J-26	1.000	501	0.999	<
J-29	J-30	0.000	22,113	<	0.0002
	J-34	1.000	22,113	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-17 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	316	<	0.001
	J-52	1.000	316	0.999	<
J-50 <sup>b</sup>	J-21	0.000	316	<	0.001
	J-52	1.000	316	0.999	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	0.000	7,016	<	0.0003
	J-58	1.000	7,016	0.9997	<
J-59	J-60	0.833	7,016	0.824	0.842
	J-61	0.053	7,016	0.048	0.058
	J-62	0.114	7,016	0.107	0.121
J-62	J-63	0.377	499	0.334	0.420
	J-64	0.623	499	0.580	0.666
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.926
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.



TABLE D-18  
GROUP 2 JUMPS CONDITIONAL TRANSITION TIMES

<u>Transition from</u>	<u>Time (days)</u>	<u>Std. dev.</u>	<u>Sample size</u>	<u>Confidence limits</u>	
				<u>Lower</u>	<u>Upper</u>
J-10 <sup>a</sup>	26.840	48.783	162	19.266	34.414
J-10 <sup>b</sup>	11.556	11.230	142	9.683	13.429
J-12	10.302	16.027	169	7.866	12.738
J-14	4.257	5.495	401	3.716	4.798
J-16	4.252	11.715	416	3.119	5.385
J-18	0.002	0.040	22,113	0.001	0.003
J-21	1.022	0.200	22,113	1.019	1.025
J-23	3.015	2.010	22,113	2.988	3.042
J-24	0.753	1.442	466	0.621	0.885
J-26	7.324	8.643	497	6.563	8.085
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.679	2.167	315	0.438	0.920
J-50 <sup>b</sup>	0.679	2.167	315	0.438	0.920
J-52	1.242	2.245	500	1.045	1.439
J-54	8.238	6.336	496	7.680	8.796
J-56	0.000	0.000	7,016	0.000	0.000
J-59	0.969	0.174	7,016	0.965	0.973
J-60	2.341	1.747	7,016	2.300	2.382
J-62	8.010	7.358	309	7.184	8.836
J-64	5.435	6.614	310	4.694	6.176
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-1-3

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 3:  
SECOND MARINE REGIMENT

TABLE D-19

## GROUP 3 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	496	0.999	<
	M-99	0.000	496	<	0.000
M-1 <sup>b</sup>	M-2	0.960	496	0.943	0.977
	M-99	0.040	496	0.023	0.057
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.822	152	0.761	0.883
	M-20	0.034	152	0.005	0.063
	M-30	0.013	152	<	0.028
	M-40	0.013	152	<	0.028
	M-50	0.009	152	<	0.022
	M-60	0.004	152	<	0.012
	M-70	0.009	152	<	0.022
	M-77	0.096	152	0.049	0.143
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9633
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.893	355	0.861	0.925
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.211	374	0.169	0.253
	M-20	0.016	374	0.003	0.029
	M-30	0.029	374	0.012	0.046
	M-40	0.003	374	<	0.008
	M-50	0.037	374	0.018	0.056
	M-60	0.051	374	0.029	0.073
	M-70	0.008	374	<	0.016
	M-77	0.091	374	0.062	0.120
	M-81	0.553	374	0.502	0.604

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing times restricted to 60 days or less.

TABLE D-19 (CONT'D)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-18	M-7	0.437	87	0.331	0.543
	M-20	0.126	87	0.055	0.197
	M-30	0.000	87	<	0.002
	M-40	0.057	87	0.008	0.106
	M-50	0.069	87	0.015	0.123
	M-60	0.023	87	<	0.050
	M-70	0.000	87	<	0.002
	M-77	0.276	87	0.181	0.371
	M-81	0.011	87	<	0.030
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.142	450	0.110	0.174
	M-32	0.027	450	0.012	0.042
	M-33	0.831	450	0.796	0.866
M-40	M-7	0.867	487	0.837	0.897
	M-20	0.000	487	<	0.001
	M-30	0.002	487	<	0.005
	M-50	0.006	487	0.0002	0.0118
	M-60	0.037	487	0.020	0.054
	M-77	0.074	487	0.051	0.097
	M-80	0.000	487	<	0.001
	M-81	0.006	487	0.0002	0.0118
	M-83	0.008	487	0.001	0.015
M-50	M-51	0.696	438	0.653	0.739
	M-52	0.105	438	0.076	0.134
	M-53	0.199	438	0.161	0.237
M-54	M-55	0.103	87	0.038	0.168
	M-57	0.897	87	0.832	0.962

TABLE D-20  
GROUP 3 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	13.398	26.804	492	11.027	15.769
M-1 <sup>b</sup>	9.066	12.258	472	7.951	10.181
M-2	1.578	0.523	88	1.466	1.690
M-3	1.034	1.193	300	0.898	1.170
M-4	2.000	1.107	11,367	1.999	2.001
M-6	0.478	0.500	300	0.421	0.535
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.658	2.409	614	0.467	0.849
M-18	0.360	2.504	99	<	0.780
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	5.885	10.294	374	4.835	6.935
M-33	1.312	1.560	300	1.134	1.490
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	12.767	8.876	485	11.976	13.558
M-50	20.161	26.811	87	14.408	25.914
M-53	0.979	1.397	300	0.820	1.138
M-54	2.000	0.170	113,367	1.999	2.001
M-55	2.670	10.107	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

TABLE D-21  
GROUP 3 JUMPS CONDITIONAL  
TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-1	J-10	0.609	509	0.567	0.651
	J-50	0.391	509	0.349	0.433
J-10 <sup>a</sup>	J-11	0.000	310	<	0.001
	J-12	1.000	310	0.999	<
J-10 <sup>b</sup>	J-11	0.142	310	0.103	0.181
	J-12	0.858	310	0.819	0.897
J-12	J-13	0.000	58	<	0.002
	J-14	1.000	58	0.998	<
J-14	J-15	0.108	500	0.081	0.135
	J-16	0.892	500	0.865	0.919
J-16	J-17	0.108	500	0.081	0.135
	J-18	0.892	500	0.865	0.919
J-18	J-19	1.000	22,113	0.9998	<
	J-20	0.000	22,113	<	0.0002
J-21	J-22	0.000	22,113	<	0.0002
	J-23	0.896	22,113	0.892	0.900
	J-24	0.104	22,113	0.100	0.108
J-24	J-25	0.000	501	<	0.001
	J-26	1.000	501	0.999	<
J-29	J-30	0.000	22,113	<	0.0002
	J-34	1.000	22,113	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-21 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	199	<	0.001
	J-52	1.000	199	0.999	<
J-50 <sup>b</sup>	J-51	0.000	199	<	0.001
	J-52	1.000	199	0.999	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	0.000	7,016	<	0.0003
	J-58	1.000	7,016	0.9997	<
J-59	J-60	0.833	7,016	0.824	0.842
	J-61	0.053	7,016	0.048	0.058
	J-62	0.114	7,016	0.107	0.121
J-62	J-63	0.377	499	0.334	0.420
	J-64	0.623	499	0.580	0.866
J-67	J-68	0.520	214,398	0.518	0.522
	J-68	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.926
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-22  
GROUP 3 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	34.830	50.551	270	28.758	40.902
J-10 <sup>b</sup>	15.925	16.134	226	13.806	18.044
J-12	10.789	12.983	57	7.319	14.259
J-14	4.257	5.495	401	3.716	4.798
J-16	4.252	11.715	416	3.119	5.385
J-18	0.002	0.040	22,113	0.001	0.003
J-21	1.022	0.200	22,113	1.019	1.025
J-23	3.015	2.010	22,113	2.988	3.042
J-24	0.753	1.442	466	0.621	0.885
J-26	7.324	8.643	497	6.563	8.085
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.852	3.532	196	0.354	1.350
J-50 <sup>b</sup>	0.852	3.532	196	0.354	1.350
J-52	1.242	1.245	500	1.045	1.439
J-54	8.238	6.336	496	7.680	8.796
J-56	0.000	0.000	7,016	0.000	0.000
J-59	0.969	0.174	7,016	0.965	0.973
J-60	2.341	1.747	7,016	2.300	2.382
J-62	8.010	7.358	309	7.184	8.836
J-64	5.435	6.614	310	4.694	6.176
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.



TAB D-1-4

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 4:  
SIXTH MARINE REGIMENT

TABLE D-23  
GROUP 4 MMS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-1 <sup>a</sup>	M-2	1.000	315	0.999	<
	M-99	0.000	315	<	0.001
M-1 <sup>b</sup>	M-2	0.838	315	0.797	0.879
	M-99	0.162	315	0.121	0.203
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.858	126	0.796	0.920
	M-20	0.017	126	<	0.036
	M-30	0.013	126	<	0.030
	M-40	0.014	126	<	0.031
	M-50	0.001	126	<	0.006
	M-60	0.001	126	<	0.006
	M-70	0.005	126	<	0.015
	M-77	0.091	126	0.040	0.142
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.893	355	0.361	0.925
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.307	277	0.252	0.362
	M-20	0.007	277	<	0.015
	M-30	0.000	277	<	0.001
	M-40	0.000	277	<	0.001
	M-50	0.014	277	0.0001	0.0279
	M-60	0.007	277	<	0.015
	M-70	0.000	277	<	0.001
	M-77	0.000	277	<	0.001
	M-81	0.664	277	0.608	0.720

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-23 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.541	37	0.375	0.707
	M-20	0.216	37	0.079	0.353
	M-30	0.054	37	<	0.117
	M-40	0.000	37	<	0.003
	M-50	0.108	37	0.004	0.212
	M-60	0.027	37	<	0.072
	M-70	0.000	37	<	0.003
	M-77	0.000	37	<	0.003
	M-81	0.054	37	<	0.117
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.017	289	0.002	0.032
	M-32	0.024	289	0.006	0.042
	M-33	0.958	289	0.935	0.981
M-40	M-7	0.916	278	0.883	0.949
	M-20	0.000	278	<	0.001
	M-30	0.000	278	<	0.001
	M-50	0.004	278	<	0.010
	M-60	0.000	278	<	0.001
	M-77	0.076	278	0.045	0.107
	M-80	0.000	278	<	0.001
	M-81	0.000	278	<	0.001
	M-83	0.004	278	<	0.010
M-50	M-51	0.650	274	0.593	0.707
	M-52	0.215	274	0.166	0.264
	M-53	0.135	274	0.094	0.176
M-54	M-55	0.081	37	0.005	0.157
	M-57	0.919	37	0.843	0.995

TABLE D-24  
GROUP 4 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	27.956	49.544	315	22.448	33.464
M-1 <sup>b</sup>	9.682	14.397	264	7.933	11.431
M-2	1.307	1.012	101	1.107	1.507
M-3	1.034	1.193	300	0.898	1.170
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.478	0.500	300	0.421	0.535
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.056	1.951	526	<	0.196
M-18	0.493	1.377	78	0.181	0.805
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	4.816	2.857	277	4.477	5.155
M-33	1.312	1.560	300	1.134	1.490
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	8.755	5.070	278	8.155	9.355
M-50	9.622	10.388	37	6.107	13.137
M-53	0.979	1.397	300	0.820	1.138
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-25

## GROUP 4 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.438	320	0.383	0.493
	J-50	0.563	320	0.508	0.618
J-10 <sup>a</sup>	J-11	0.000	140	<	0.002
	J-12	1.000	140	0.998	<
J-10 <sup>b</sup>	J-11	0.200	140	0.133	0.267
	J-12	0.800	140	0.733	0.867
J-12	J-13	0.000	35	<	0.003
	J-14	1.000	35	0.997	<
J-14	J-15	0.108	500	0.081	0.135
	J-16	0.892	500	0.865	0.919
J-16	J-17	0.108	500	0.081	0.135
	J-18	0.892	500	0.865	0.919
J-18	J-19	1.000	22,113	0.9998	<
	J-20	0.000	22,113	<	0.0002
J-21	J-22	0.000	22,113	<	0.0002
	J-23	0.896	22,113	0.892	0.900
	J-24	0.104	22,113	0.100	0.108
J-24	J-25	0.000	501	<	0.001
	J-26	1.000	501	0.999	<
J-29	J-30	0.000	22,113	<	0.0002
	J-34	1.000	22,113	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-25 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	180	<	0.001
	J-52	1.000	180	0.999	<
J-50 <sup>b</sup>	J-51	0.006	180	<	0.016
	J-52	0.994	180	0.984	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	0.000	7,016	<	0.0003
	J-58	1.000	7,016	0.9997	<
J-59	J-60	0.833	7,016	0.824	0.842
	J-61	0.053	7,016	0.048	0.058
	J-62	0.114	7,016	0.107	0.121
J-62	J-63	0.377	499	0.334	0.420
	J-64	0.623	499	0.580	0.666
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.926
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-26  
GROUP 4 JUMPS CONDITIONAL TRANSITION TIMES

<u>Transition from</u>	<u>Time (days)</u>	<u>Std. dev.</u>	<u>Sample size</u>	<u>Confidence limits</u>	
				<u>Lower</u>	<u>Upper</u>
J-10 <sup>a</sup>	41.955	56.747	134	32.212	51.698
J-10 <sup>b</sup>	17.915	15.897	106	14.843	20.987
J-12	6.543	5.559	35	4.608	8.478
J-14	4.257	5.495	401	3.716	4.798
J-16	4.252	11.715	416	3.119	5.385
J-18	0.002	0.040	22,113	0.001	0.003
J-21	1.022	0.200	22,113	1.019	1.025
J-23	3.015	2.010	22,113	2.988	3.042
J-24	0.753	1.442	466	0.621	0.885
J-26	7.324	8.643	497	6.563	8.085
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	1.467	9.012	180	0.140	2.794
J-50 <sup>b</sup>	0.827	2.752	179	0.421	1.233
J-52	1.242	2.245	500	1.045	1.439
J-54	8.238	6.336	496	7.680	8.796
J-56	0.000	0.000	7,016	0.000	0.000
J-59	0.969	0.174	7,016	0.965	0.973
J-60	2.341	1.747	7,016	2.300	2.382
J-62	8.010	7.358	309	7.184	8.836
J-64	5.435	6.614	310	4.694	6.176
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-1-5

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 5:  
EIGHTH MARINE REGIMENT



TABLE D-27

## GROUP 5 MMS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-1 <sup>a</sup>	M-2	1.000	454	0.999	<
	M-99	0.000	454	<	0.001
M-1 <sup>b</sup>	M-2	0.901	454	0.873	0.927
	M-99	0.099	454	0.071	0.127
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.776	142	0.707	0.845
	M-20	0.070	142	0.028	0.112
	M-30	0.009	142	<	0.022
	M-40	0.043	142	0.009	0.077
	M-50	0.009	142	<	0.022
	M-60	0.003	142	<	0.011
	M-70	0.006	142	<	0.017
	M-77	0.084	142	0.038	0.130
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.934	989,486	0.0336	0.0344
M-16	M-7	0.893	355	0.861	0.925
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.357	428	0.311	0.403
	M-20	0.007	428	<	0.014
	M-30	0.019	428	0.006	0.032
	M-40	0.000	428	<	0.001
	M-50	0.057	428	0.035	0.079
	M-60	0.016	428	0.004	0.028
	M-70	0.000	428	<	0.001
	M-77	0.257	428	0.215	0.299
	M-81	0.286	428	0.243	0.329

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-27 (CONT.)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-18	M-7	0.705	112	0.620	0.790
	M-20	0.063	112	0.018	0.108
	M-30	0.009	112	<	0.024
	M-40	0.027	112	<	0.052
	M-50	0.098	112	0.042	0.154
	M-60	0.009	112	<	0.024
	M-70	0.000	112	<	0.002
	M-77	0.080	112	0.029	0.131
	M-81	0.009	112	<	0.024
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.100	489	0.073	0.127
	M-32	0.025	489	0.011	0.039
	M-33	0.875	489	0.846	0.904
M-40	M-7	0.924	438	0.899	0.949
	M-20	0.009	438	0.0001	0.0179
	M-30	0.000	438	<	0.001
	M-50	0.011	438	0.001	0.021
	M-60	0.034	438	0.017	0.051
	M-77	0.011	438	0.001	0.021
	M-80	0.000	438	<	0.001
	M-81	0.002	438	<	0.006
	M-83	0.009	438	0.0001	0.0179
M-50	M-51	0.606	485	0.562	0.650
	M-52	0.163	485	0.130	0.196
	M-53	0.231	485	0.194	0.268
M-54	M-55	0.170	112	0.100	0.240
	M-57	0.830	112	0.760	0.900

TABLE D-28  
GROUP 5 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	22.942	49.638	451	18.332	27.552
M-1 <sup>b</sup>	9.076	12.720	407	7.832	10.320
M-2	2.529	0.615	97	2.405	2.654
M-3	1.034	1.193	300	0.898	1.170
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.478	0.500	300	0.421	0.535
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	241	0.832	1.608
M-17	0.648	2.749	652	0.437	0.859
M-18	1.321	9.836	109	<	2.892
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	5.792	5.767	428	5.242	6.342
M-33	1.312	1.560	300	1.134	1.490
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	8.129	6.133	434	7.548	8.710
M-50	15.571	23.341	112	11.184	19.958
M-53	0.979	1.397	300	0.820	1.138
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-29  
GROUP 5 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.379	499	0.336	0.422
	J-50	0.621	499	0.578	0.664
J-10 <sup>a</sup>	J-11	0.000	189	<	0.001
	J-12	1.000	189	0.999	<
J-10 <sup>b</sup>	J-11	0.111	189	0.066	0.156
	J-12	0.889	189	0.844	0.934
J-12	J-13	0.000	40	<	0.003
	J-14	1.000	40	0.997	<
J-14	J-15	0.108	500	0.081	0.135
	J-16	0.892	500	0.865	0.919
J-16	J-17	0.108	500	0.081	0.135
	J-18	0.892	500	0.865	0.919
J-18	J-19	1.000	22,113	0.9998	<
	J-20	0.000	22,113	<	0.0002
J-21	J-22	0.000	22,113	<	0.0002
	J-23	0.896	22,113	0.892	0.900
	J-24	0.104	22,113	0.100	0.108
J-24	J-25	0.000	501	<	0.001
	J-26	1.000	501	0.999	<
J-29	J-30	0.000	22,113	<	0.0002
	J-34	1.000	22,113	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-29 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	310	<	0.001
	J-52	1.000	310	0.999	<
J-50 <sup>b</sup>	J-51	0.000	310	<	0.001
	J-52	1.000	310	0.999	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	0.000	7,016	<	0.0003
	J-58	1.000	7,016	0.9997	<
J-59	J-60	0.833	7,016	0.824	0.842
	J-61	0.053	7,016	0.048	0.058
	J-62	0.114	7,016	0.107	0.121
J-62	J-63	0.377	499	0.334	0.420
	J-64	0.623	499	0.580	0.666
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.926
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	294,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>processing time restricted to 60 days or less.

TABLE D-30  
GROUP 5 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	21.840	33.136	188	17.066	26.614
J-10 <sup>b</sup>	12.042	14.435	167	9.835	14.249
J-12	8.700	8.436	40	5.955	11.443
J-14	4.257	5.495	401	3.716	4.798
J-16	4.252	11.715	416	3.119	5.385
J-18	0.002	0.040	22,113	0.001	0.003
J-21	1.022	0.200	22,113	1.019	1.025
J-23	3.015	2.010	22,113	2.988	3.042
J-24	0.753	1.442	466	0.621	0.885
J-26	7.324	8.643	497	6.563	8.085
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.773	2.416	304	0.500	1.046
J-50 <sup>b</sup>	0.773	2.416	304	0.500	1.046
J-52	1.242	2.245	500	1.045	1.439
J-54	8.238	6.336	496	7.680	8.796
J-56	0.000	0.000	7,016	0.000	0.000
J-59	0.969	0.174	7,016	0.965	0.973
J-60	2.341	1.747	7,016	2.300	2.382
J-62	8.010	7.358	309	7.184	8.836
J-64	5.435	6.614	310	4.694	6.176
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-1-6

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 6:  
TENTH MARINE REGIMENT

TABLE D-31  
GROUP 6 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	500	0.999	<
	M-99	0.000	500	<	0.001
M-1 <sup>b</sup>	M-2	0.972	500	0.958	0.986
	M-99	0.028	500	0.014	0.042
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.789	140	0.721	0.857
	M-20	0.071	140	0.028	0.114
	M-30	0.013	140	<	0.029
	M-40	0.027	140	<	0.050
	M-50	0.003	140	<	0.011
	M-60	0.000	140	<	0.002
	M-70	0.012	140	<	0.027
	M-77	0.085	140	0.038	0.132
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.893	355	0.861	0.925
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing times restricted to 60 days or less.



TABLE D-31 (CONT'D)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-17	M-7	0.205	429	0.167	0.243
	M-20	0.005	429	<	0.011
	M-30	0.019	429	0.006	0.032
	M-40	0.000	429	<	0.001
	M-50	0.042	429	0.023	0.061
	M-60	0.007	429	<	0.014
	M-70	0.002	429	<	0.006
	M-77	0.226	429	0.186	0.266
	M-81	0.493	429	0.445	0.541
M-18	M-7	0.243	111	0.162	0.324
	M-20	0.045	111	0.006	0.084
	M-30	0.045	111	0.006	0.084
	M-40	0.000	111	<	0.002
	M-50	0.117	111	0.057	0.177
	M-60	0.000	111	<	0.002
	M-70	0.000	111	<	0.002
	M-77	0.090	111	0.036	0.144
	M-81	0.459	111	0.365	0.553
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.112	493	0.084	0.140
	M-32	0.018	493	0.006	0.030
	M-33	0.870	493	0.840	0.900

TABLE D-31 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-40	M-7	0.938	500	0.917	0.959
	M-20	0.000	500	<	0.001
	M-30	0.000	500	<	0.001
	M-50	0.002	500	<	0.005
	M-60	0.006	500	<	0.013
	M-77	0.054	500	0.034	0.074
	M-80	0.000	500	<	0.001
	M-81	0.000	500	<	0.001
	M-83	0.000	500	<	0.001
M-50	M-51	0.741	501	0.703	0.779
	M-52	0.038	501	0.021	0.055
	M-53	0.221	501	0.185	0.257
M-54	M-55	0.225	111	0.146	0.304
	M-57	0.775	111	0.696	0.854

TABLE D-32  
GROUP 6 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	9.592	19.650	500	7.868	11.316
M-1 <sup>b</sup>	7.053	11.191	486	6.057	8.049
M-2	1.536	0.459	115	1.451	1.621
M-3	1.034	1.193	300	0.898	1.170
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.478	0.500	300	0.421	0.535
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.796	2.769	649	0.583	1.009
M-18	0.254	1.928	166	<	0.502
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	7.249	9.776	429	6.318	8.180
M-33	1.312	1.560	300	1.134	1.490
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	9.154	6.636	494	8.568	9.740
M-50	7.658	7.786	111	6.188	9.128
M-53	0.979	1.397	300	0.820	1.138
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-33

## GROUP 6 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.229	497	0.192	0.266
	J-50	0.771	497	0.734	0.808
J-10 <sup>a</sup>	J-11	0.009	114	<	0.024
	J-12	0.991	114	0.976	<
J-10 <sup>b</sup>	J-11	0.149	114	0.083	0.215
	J-12	0.851	114	0.785	0.917
J-12	J-13	0.000	26	<	0.003
	J-14	1.000	26	0.997	<
J-14	J-15	0.108	500	0.081	0.135
	J-16	0.892	500	0.865	0.919
J-16	J-17	0.108	500	0.081	0.135
	J-18	0.892	500	0.865	0.919
J-18	J-19	1.000	22,113	0.9998	<
	J-20	0.000	22,113	<	0.0002
J-21	J-22	0.000	22,113	<	0.0002
	J-23	0.896	22,113	0.892	0.900
	J-24	0.104	22,113	0.100	0.108
J-24	J-25	0.000	501	<	0.001
	J-26	1.000	501	0.999	<
J-29	J-30	0.000	22,113	<	0.0002
	J-34	1.000	22,113	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,197	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-33 (CONT.)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	383	<	0.001
	J-52	1.000	383	0.999	<
J-50 <sup>b</sup>	J-51	0.000	383	<	0.001
	J-52	1.000	383	0.999	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	0.000	7,016	<	0.0003
	J-58	1.000	7,016	0.9997	<
J-59	J-60	0.833	7,016	0.824	0.842
	J-61	0.053	7,016	0.048	0.058
	J-62	0.114	7,016	0.107	0.121
J-62	J-63	0.377	499	0.334	0.420
	J-64	0.623	499	0.580	0.666
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.926
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.086
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-34  
GROUP 6 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	30.218	47.764	110	21.160	39.276
J-10 <sup>b</sup>	14.723	12.006	94	12.246	17.200
J-12	16.269	17.733	26	8.963	23.575
J-14	4.257	5.495	401	3.716	4.798
J-16	4.252	11.715	416	3.119	5.385
J-18	0.002	0.040	22,113	0.001	0.003
J-21	1.022	0.200	22,113	1.019	1.025
J-23	3.015	2.010	22,113	2.988	3.042
J-24	0.753	1.442	466	0.621	0.885
J-26	7.324	8.643	497	6.563	8.085
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.402	1.540	381	0.246	0.558
J-50 <sup>b</sup>	0.402	1.540	381	0.246	0.558
J-52	1.242	2.245	500	1.045	1.439
J-54	8.238	6.336	496	7.680	8.796
J-56	0.000	0.000	7,016	0.000	0.000
J-59	0.969	0.174	7,016	0.965	0.973
J-60	2.341	1.747	7,016	2.300	2.382
J-62	8.010	7.358	309	7.184	8.836
J-64	5.435	6.614	310	4.694	6.176
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

ANNEX D-2

DETAILED RESULTS FOR DATA GROUPS 7 THROUGH 11

ANNEX D-2

DETAILED RESULTS FOR DATA GROUPS 7 THROUGH 11

This annex contains the detailed results of our analysis of information processing in JUMPS/MMS for the following data groups:

<u>Group</u>	<u>Unit</u>	<u>DSSN</u>	<u>SDPI</u>
7	MCAS, Cherry Point	5136	02
8	MAG-14	5136	02
9	MWSG-27	5136	02
10	MACG-28	5136	02
11	MAG-32	5136	02



TABLE D-35

MMS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group				
	7	8	9	10	11
Event not reported					
Unrestricted	0.000	0.000	0.000	0.000	0.000
Restricted	0.010	0.000	0.021	0.015	0.144
Primary distribution of reported events					
Accepted - passed to KC in UTR para. 1/7	0.922	0.942	0.936	0.883	0.915
Rejected to RU in UTR para. 2/6	0.013	0.013	0.010	0.014	0.006
Rejected to ACU	0.022	0.022	0.032	0.043	0.048
Deleted (UTR para. 4)	0.002	0.002	0.001	0.003	0.003
Advisory message (UTR para. 5)	0.003	0.003	0.001	0.004	0.007
Suspense file	0.025	0.025	0.015	0.047	0.015
ACU/SDPI loss	0.011	0.011	0.005	0.006	0.006
UTR para. 2/6 entry not resubmitted	0.032	0.000	0.042	0.030	0.023
UTR. para. 5 entry not resubmitted	0.040	0.400	0.013	0.000	0.000
CDPA/MCFC edit - poster failures					
Edit failures	0.001	0.001	0.001	0.001	0.001
Poster failures	0.034	0.034	0.034	0.034	0.034

TABLE D-36

MMS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

<u>Outcome</u>	<u>Group</u>				
	7	8	9	10	11
Event not reported	0.000	0.000	0.000	0.000	0.000
UTR para. 2/6 entry - not corrected	0.000	0.000	0.000	0.000	0.000
UTR para. 5 entry - not corrected	0.000	0.002	0.000	0.000	0.000
Rejected to RU - no action required	0.004	0.001	0.004	0.007	0.009
UTR para. 4 entry	0.003	0.000	0.005	0.003	0.003
Scanner reject - not corrected	0.000	0.000	0.000	0.000	0.000
Edit reject - not corrected	0.000	0.000	0.000	0.001	0.001
Lost in edit	0.011	0.010	0.003	0.006	0.006
Rejected to ACU - no action required	0.001	0.006	0.009	0.012	0.014
Lost in suspense file	0.000	0.000	0.000	0.000	0.000
Posted to CMR	0.980	0.981	0.977	0.970	0.967

TABLE D-37  
MMS TIMES (DAYS) FOR SELECTED TRANSITIONS

<u>Transition</u>	<u>Group</u>				
	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
From event to Unit Diary					
Unrestricted	3.86	3.59	3.74	7.85	18.89
Restricted	3.69	3.59	3.52	6.88	8.17
From UD to ACU scanning	2.64	3.23	3.23	3.53	3.03
From ACU scan to UTR	0.27	0.27	0.27	0.27	0.27
From UTR para. 2/6 to RU resubmission	5.21	3.94	7.46	4.28	11.05
From UTR para. 5 to RU resubmission	8.94	2.33	17.20	4.67	10.57
From suspense file to suspense file	8.46	15.50	8.33	8.18	8.79
From rejection to ACU to ACU resubmission	1.73	1.73	1.73	1.73	1.73
From rejection to ACU to AUTODIN entry	5.37	5.31	5.34	5.31	5.41
From ACU scan to CDPA edit	3.24	3.21	3.25	3.50	3.34
From AUTODIN entry to CDPA edit	2.64	2.64	2.64	2.64	2.64
From CDPA receipt to CMR posting	1.71	1.71	1.71	1.71	1.71
Event occurrence to CMR posting	11.93	12.22	13.20	17.82	27.23

TABLE D-38

CUMULATIVE PROBABILITY DISTRIBUTION OF MMS TIMES  
FOR TRANSITION FROM EVENT TO UNIT DIARY

Time (days)	Group				
	7	8	9	10	11
0	0.170	0.268	0.296	0.293	0.178
1	0.460	0.561	0.498	0.414	0.500
2	0.552	0.561	0.540	0.474	0.539
3	0.658	0.561	0.581	0.649	0.602
4	0.771	0.561	0.722	0.687	0.612
5	0.888	0.854	0.884	0.687	0.639
6	0.896	0.915	0.827	0.694	0.646
7	0.918	0.976	0.864	0.697	0.646
8	0.930	0.976	0.884	0.707	0.646
10	0.933	0.976	0.930	0.784	0.646
15	0.943	0.976	0.978	0.835	0.702
20	0.973	0.976	0.985	0.897	0.722
30	0.982	0.976	0.991	0.912	0.756
40	0.992	0.988	0.993	0.975	0.805
50	0.996	0.988	0.996	0.975	0.817
52	0.996	1.000	0.996	0.975	0.820
65	0.998	--	1.000	0.985	0.856
73	0.998	--	--	1.000	0.902
86	1.000	--	--	--	0.949
131	--	--	--	--	1.000

TABLE D-39

JUMPS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

<u>Outcome</u>	<u>Group</u>				
	7	8	9	10	11
Primary separation					
ABA event	0.605	0.314	0.296	0.581	0.611
TODE event	0.395	0.686	0.704	0.419	0.389
ABA event not reported	0.000	0.000	0.000	0.000	0.000
ABA lost at DO	0.000	0.000	0.000	0.000	0.000
ABA decentrally processed	0.000	0.000	0.000	0.000	0.000
ABA read by scanner	0.000	0.000	0.000	0.000	0.000
ABA scanner rejects lost	0.000	0.000	0.000	0.000	0.000
TODE event not reported	0.000	0.000	0.000	0.000	0.000
TODE document lost at DO	0.000	0.000	0.000	0.000	0.000
TODE lost at DO	0.000	0.000	0.000	0.000	0.000
TODE decentrally processed	0.000	0.000	0.000	0.000	0.000
TODE read by scanner	0.000	0.000	0.000	0.000	0.000
TODE scanner rejects lost	0.000	0.000	0.000	0.000	0.000
MCFC scanner rejects of ABA	0.078	0.078	0.078	0.078	0.078
MCFC posting failure for ABA	0.041	0.041	0.041	0.041	0.041
MCFC scanner reject of TODE	0.018	0.018	0.018	0.018	0.018
MCFC posting failure for TODE	0.034	0.034	0.034	0.034	0.034

TABLE D-40  
JUMPS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

Outcome	Group				
	7	8	9	10	11
ABA event not reported	0.000	0.000	0.000	0.000	0.000
ABA lost at DO	0.000	0.000	0.000	0.000	0.000
ABA rejected at MCFC - not resubmitted	0.000	0.000	0.000	0.000	0.000
TODE event not reported	0.000	0.000	0.000	0.000	0.000
TODE document lost at RU	0.000	0.000	0.000	0.000	0.000
TODE document lost at DO	0.000	0.000	0.000	0.000	0.000
TODE lost at DO	0.000	0.000	0.000	0.000	0.000
TODE rejected at ACU - lost	0.000	0.000	0.000	0.000	0.000
TODE rejected at MCFC - lost	0.000	0.000	0.000	0.000	0.000
ABA posted to MMPA	1.000	1.000	1.000	1.000	1.000
TODE posted to MMPA	1.000	1.000	1.000	1.000	1.000

TABLE D-41  
JUMPS TIMES (DAYS) FOR SELECTED ABA TRANSITIONS

<u>Transition</u>	<u>Group</u>				
	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
From ABA event to ABA					
Unrestricted	0.20	0.48	0.10	0.50	0.36
Restricted	0.20	0.48	0.10	0.50	0.36
From ABA preparation to receipt at DO	2.23	2.23	2.23	2.23	2.23
From ABA receipt at DO to DTL	3.36	3.36	3.36	3.36	3.36
From DTL preparation to decentral scan	0.00	0.00	0.00	0.00	0.00
From decentral scan to mailing	0.00	0.00	0.00	0.00	0.00
From DTL preparation to mailing	0.00	0.00	0.00	0.00	0.00
From ABA receipt at MCFC to central scan	0.64	0.64	0.64	0.64	0.64
From central scan to posting to MMPA	0.00	0.00	0.00	0.00	0.00
From receipt at MCFC to posting	1.21	1.21	1.21	1.21	1.21
From ABA event to posting to MMPA	9.90	10.18	9.79	10.06	9.90

TABLE D-42  
JUMPS TIMES (DAYS) FOR SELECTED TODÉ TRANSITIONS

Transition	Group				
	7	8	9	10	11
From TODÉ event to TODÉ document					
Unrestricted	25.39	20.02	31.30	19.77	20.40
Restricted	15.18	12.15	13.45	15.63	11.28
From TODÉ document preparation to receipt at DO	6.00	4.71	2.92	5.86	9.26
From document receipt at DO to TODÉ	3.25	3.25	3.25	3.25	3.25
From TODÉ to DTL preparation	3.09	3.09	3.09	3.09	3.09
From DTL preparation to decentral scan	0.00	0.00	0.00	0.00	0.00
From decentral scan to mailing	0.00	0.00	0.00	0.00	0.00
From DTL preparation to mailing	0.00	0.00	0.00	0.00	0.00
From TODÉ receipt at MCFC to central scan	1.06	1.06	1.06	1.06	1.06
From central scan to posting to MMPA	0.01	0.01	0.01	0.01	0.01
From receipt at MCFC to posting to MMPA	1.35	1.55	1.35	1.35	1.35
From TODÉ event to posting to MMPA	43.24	28.49	46.08	41.52	43.24



TABLE D-43  
CUMULATIVE PROBABILITY DISTRIBUTION OF JUMPS  
TIMES FOR TRANSITION FROM ABA EVENT TO ABA

Time (days)	Group				
	7	8	9	10	11
0	0.893	0.826	0.905	0.917	0.879
1	0.947	0.913	1.000	0.917	0.909
2	0.960	0.935	--	0.917	0.939
3	1.000	0.935	--	0.944	0.970
4	--	0.957	--	0.944	0.970
5	--	0.957	--	0.944	0.970
6	--	1.000	--	0.944	1.000
7	--	--	--	0.972	--
8	--	--	--	1.000	--

TABLE D-44  
CUMULATIVE PROBABILITY DISTRIBUTION OF JUMPS TIMES  
FOR TRANSITION FROM TODE EVENT TO TODE DOCUMENT

Time (days)	Group				
	7	8	9	10	11
0	0.000	N/A	0.021	0.077	0.050
1	0.000		0.043	0.077	0.050
2	0.061		0.064	0.115	0.050
3	0.102		0.149	0.154	0.100
4	0.184		0.191	0.154	0.250
5	0.306		0.298	0.192	0.250
6	0.347		0.362	0.231	0.350
7	0.347		0.362	0.269	0.350
8	0.388		0.362	0.269	0.350
10	0.531		0.426	0.385	0.450
15	0.612		0.596	0.577	0.700
20	0.673		0.681	0.692	0.750
30	0.796		0.745	0.769	0.850
40	0.837		0.809	0.846	0.900
50	0.878		0.809	0.923	0.900
72	0.918		0.894	1.000	0.900
75	0.918		0.894	--	0.900
100	0.959		0.957	--	0.950
119	0.980		0.979	--	1.000
269	1.000		0.979	--	--
342	--		1.000	--	--

TAB D-2-1

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 7:  
MARINE CORPS AIR STATION, CHERRY POINT, NORTH CAROLINA

TABLE D-45  
GROUP 7 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	500	.9992	<
	M-99	0.000	500	<	.0008
M-1 <sup>b</sup>	M-2	0.990	500	.981	.999
	M-99	0.010	500	.001	.019
M-4	M-5	0.988	113,367	.987	.989
	M-12	0.012	113,367	.011	.013
M-6	M-7	0.836	122	.770	.902
	M-20	0.022	122	<	.044
	M-30	0.013	122	<	.030
	M-40	0.025	122	<	.048
	M-50	0.003	122	<	.011
	M-60	0.002	122	<	.009
	M-70	0.011	122	<	.027
	M-77	0.088	122	.037	.139
M-9	M-10	0.999	582,635	.9989	<
	M-91	0.001	582,635	<	.0011
M-10	M-11	0.966	989,486	.9657	.9663
	M-91	0.034	989,486	.0336	.0344
M-16	M-7	0.893	355	.861	.925
	M-20	0.011	355	.0001	.0219
	M-30	0.000	355	<	.001
	M-40	0.003	355	<	.008
	M-50	0.056	355	.032	.080
	M-60	0.000	355	<	.001
	M-60	0.008	355	<	.016
	M-77	0.017	355	.003	.030
	M-81	0.011	355	.0001	.0219
M-17	M-7	0.852	61	.761	.943
	M-20	0.000	61	<	.002
	M-30	0.000	61	<	.002
	M-40	0.000	61	<	.002
	M-50	0.033	61	<	.071
	M-60	0.000	61	<	.002
	M-70	0.000	61	<	.002
	M-77	0.115	61	.033	.197
	M-81	0.000	61	<	.002

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-45 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	1.000	171	.998	<
	M-20	0.000	171	<	.002
	M-30	0.000	171	<	.002
	M-40	0.000	171	<	.002
	M-50	0.000	171	<	.002
	M-60	0.000	171	<	.002
	M-70	0.000	171	<	.002
	M-77	0.000	171	<	.002
	M-81	0.000	171	<	.002
M-19	M-7	0.000	499	<	.001
	M-20	0.032	499	.017	.047
	M-30	0.008	499	<	.015
	M-40	0.000	499	<	.001
	M-50	0.036	499	.020	.052
	M-60	0.000	499	<	.001
	M-77	0.924	499	.901	.947
M-20	M-21	0.275	499	.236	.314
	M-22	0.014	499	.004	.024
	M-23	0.711	499	.671	.751
M-23	M-24	0.026	13,545	.023	.029
	M-25	0.974	13,545	.971	.977
M-30	M-31	0.000	63	<	.002
	M-32	0.032	63	<	.069
	M-33	0.968	63	.931	<
M-40	M-7	0.960	200	.933	.987
	M-20	0.000	200	<	.001
	M-30	0.000	200	<	.001
	M-50	0.010	200	<	.022
	M-60	0.030	200	.006	.054
	M-77	0.000	200	<	.001
	M-80	0.000	200	<	.001
	M-81	0.000	200	<	.001
	M-83	0.000	200	<	.001
M-50	M-51	0.823	124	.755	.891
	M-52	0.040	124	.005	.075
	M-53	0.137	124	.076	.198
M-54	M-55	0.176	171	.119	.233
	M-57	0.824	171	.767	.881

TABLE D-46  
GROUP 7 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	3.861	7.226	489	3.220	4.502
M-1 <sup>b</sup>	3.693	6.200	488	3.142	4.244
M-2	1.148	1.009	75	0.915	1.381
M-3	1.489	1.702	200	1.251	1.727
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.271	0.303	200	0.229	0.313
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.030	2.064	153	<	0.306
M-18	0.478	1.977	321	0.260	0.696
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	5.213	7.132	61	3.372	7.055
M-33	1.226	2.005	200	0.946	1.506
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	8.460	16.468	200	6.160	10.760
M-50	8.941	8.105	171	7.716	10.166
M-53	1.454	2.632	200	1.086	1.822
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-47

## GROUP 7 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.395	124	0.308	0.482
	J-50	0.605	124	0.518	0.692
J-10 <sup>a</sup>	J-11	0.000	49	<	0.003
	J-12	1.000	49	0.997	<
J-10 <sup>b</sup>	J-11	0.082	49	0.003	0.161
	J-12	0.918	49	0.839	0.997
J-12	J-13	0.000	13	<	0.005
	J-14	1.000	13	0.995	<
J-14	J-15	0.000	120	<	0.002
	J-16	1.000	120	0.998	<
J-16	J-17	0.000	120	<	0.002
	J-18	1.000	120	0.998	<
J-18	J-19	0.000	5,669	<	0.0003
	J-20	1.000	5,669	0.9997	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	5,669	<	0.0003
	J-34	0.000	5,669	0.9997	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.067	17,070	0.063	0.071
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-47 (CONT'D)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-50 <sup>a</sup>	J-51	0.000	75	<	.002
	J-52	1.000	75	.998	<
J-50 <sup>b</sup>	J-51	0.000	75	<	.002
	J-52	1.000	75	.998	<
J-52	J-53	0.000	217	<	.001
	J-54	1.000	217	.999	<
J-54	J-55	0.000	217	<	.001
	J-56	1.000	217	.999	<
J-56	J-57	1.000	4,895	.9997	<
	J-58	0.000	4,895	<	.0003
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	.518	.522
	J-88	0.480	214,398	.478	.482
J-68	J-70	0.922	111,555	.920	.924
	J-71	0.078	111,555	.076	.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	.984	.986
J-74	J-75	0.077	6,883	.071	.083
	J-76	0.923	6,883	.917	.929
J-88	J-73	0.026	204,189	.025	.027
	J-99	0.974	204,189	.973	.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.



TABLE D-48  
GROUP 7 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	25.388	43.166	49	12.865	37.911
J-10 <sup>b</sup>	15.178	14.558	45	10.745	19.611
J-12	6.000	6.178	131	4.927	7.073
J-14	3.252	1.828	119	2.919	3.585
J-16	3.092	5.001	120	2.184	4.000
J-18	0.000	0.000	5,669	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,373	0.003	0.009
J-50 <sup>a</sup>	0.200	0.658	3,373	0.048	0.352
J-50 <sup>b</sup>	0.200	0.658	75	0.048	0.352
J-52	2.226	2.777	217	1.854	2.598
J-54	3.355	3.021	217	2.950	3.760
J-56	0.000	0.000	4,985	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TAB D-2-2

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 8:  
MARINE AIR GROUP FOURTEEN

TABLE D-49  
GROUP 8 MMS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-1 <sup>a</sup>	M-2	1.000	82	0.998	<
	M-99	0.000	82	<	0.002
M-1 <sup>b</sup>	M-2	1.000	82	0.998	<
	M-99	0.000	82	<	0.002
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.857	159	0.802	0.912
	M-20	0.021	159	<	0.040
	M-30	0.006	159	<	0.016
	M-40	0.011	159	<	0.025
	M-50	0.002	159	<	0.008
	M-60	0.000	159	<	0.001
	M-70	0.009	159	<	0.021
	M-77	0.093	159	0.047	0.138
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.893	355	0.861	0.925
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.765	71	0.665	0.865
	M-20	0.000	71	<	0.002
	M-30	0.000	71	<	0.002
	M-40	0.000	71	<	0.002
	M-50	0.000	71	<	0.002
	M-60	0.000	71	<	0.002
	M-70	0.000	71	<	0.002
	M-77	0.235	71	0.135	0.335
	M-81	0.000	71	<	0.002

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-49 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.333	15	0.073	0.593
	M-20	0.000	15	<	0.005
	M-30	0.000	15	<	0.005
	M-40	0.000	15	<	0.005
	M-50	0.000	15	<	0.005
	M-60	0.000	15	<	0.005
	M-70	0.667	15	0.407	0.927
	M-77	0.000	15	<	0.005
	M-81	0.000	15	<	0.005
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.000	17	<	0.004
	M-32	0.000	17	<	0.004
	M-33	1.000	17	0.996	<
M-40	M-7	1.000	22	0.996	<
	M-20	0.000	22	<	0.004
	M-30	0.000	22	<	0.004
	M-50	0.000	22	<	0.004
	M-60	0.000	22	<	0.004
	M-77	0.000	22	<	0.004
	M-80	0.000	22	<	0.004
	M-81	0.000	22	<	0.004
	M-83	0.000	22	<	0.004
M-50	M-51	0.350	60	0.227	0.473
	M-52	0.400	60	0.274	0.527
	M-53	0.250	60	0.138	0.362
M-54	M-55	0.000	15	<	0.005
	M-57	1.000	15	0.995	<

TABLE D-50  
GROUP 8 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	3.585	6.838	82	2.073	5.097
M-1 <sup>b</sup>	3.585	6.383	82	2.073	5.097
M-2	1.743	0.818	120	1.595	1.892
M-3	1.489	1.702	200	1.251	1.727
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.271	0.303	200	0.229	0.313
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.478	2.067	349	0.260	0.696
M-18	0.478	1.950	150	0.162	0.794
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	3.941	1.784	17	3.000	4.887
M-33	1.226	2.005	200	0.946	1.506
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	15.500	11.496	22	10.282	20.718
M-50	2.333	3.519	150	1.762	2.904
M-53	1.454	2.632	200	1.086	1.822
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-51  
GROUP 8 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.686	46	0.549	0.824
	J-50	0.314	46	0.177	0.452
J-10 <sup>a</sup>	J-11	0.000	46	<	0.003
	J-12	1.000	46	0.997	<
J-10 <sup>b</sup>	J-11	0.000	46	<	0.003
	J-12	1.000	46	0.997	<
J-12	J-13	0.000	14	<	0.003
	J-14	1.000	14	0.997	<
J-14	J-15	0.000	120	<	0.002
	J-16	1.000	120	0.998	<
J-16	J-17	0.000	120	<	0.002
	J-18	1.000	120	0.998	<
J-18	J-19	0.000	5,669	<	0.0003
	J-20	1.000	5,669	0.9997	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	5,669	<	0.0003
	J-34	0.000	5,669	0.9997	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.067	17,070	0.063	0.071
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-51 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	46	<	0.003
	J-52	1.000	46	0.997	<
J-50 <sup>b</sup>	J-51	0.000	46	<	0.003
	J-52	1.000	46	0.997	<
J-52	J-53	0.000	217	<	0.001
	J-54	1.000	217	0.999	<
J-54	J-55	0.000	217	<	0.001
	J-56	1.000	217	0.999	<
J-56	J-57	1.000	4,895	0.9997	<
	J-58	0.000	4,895	<	0.0003
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-52  
GROUP 8 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	20.020	15.977	72	16.247	23.793
J-10 <sup>b</sup>	12.153	8.722	72	10.093	14.213
J-12	4.714	5.370	14	1.497	7.931
J-14	3.252	1.828	119	2.919	3.585
J-16	3.092	5.001	120	2.184	4.000
J-18	0.000	0.000	5,669	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.478	1.378	46	0.065	0.891
J-50 <sup>b</sup>	0.478	1.378	46	0.065	0.891
J-52	2.226	2.777	217	1.854	2.598
J-54	3.355	3.021	217	2.950	3.760
J-56	0.000	0.000	4,895	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.



TAB D-2-3

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 9:  
MARINE WING SUPPORT GROUP TWENTY-SEVEN

TABLE D-53  
GROUP 9 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	563	0.999	<
	M-99	0.000	563	<	0.001
M-1 <sup>b</sup>	M-2	0.979	563	0.967	0.991
	M-99	0.021	563	0.009	0.033
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.833	123	0.766	0.900
	M-20	0.032	123	0.001	0.063
	M-30	0.010	123	<	0.025
	M-40	0.015	123	<	0.033
	M-50	0.001	123	<	0.006
	M-60	0.001	123	<	0.006
	M-70	0.005	123	<	0.016
	M-77	0.103	123	0.049	0.157
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.394	355	0.862	0.926
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.357	91	0.784	0.930
	M-20	0.000	91	<	0.002
	M-30	0.000	91	<	0.002
	M-40	0.000	91	<	0.002
	M-50	0.077	91	0.021	0.133
	M-60	0.000	91	<	0.002
	M-70	0.000	91	<	0.002
	M-77	0.066	91	0.023	0.109
	M-81	0.000	91	<	0.002

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-53 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	1.000	5	0.990	<
	M-20	0.000	5	<	0.010
	M-30	0.000	5	<	0.010
	M-40	0.000	5	<	0.010
	M-50	0.000	5	<	0.010
	M-60	0.000	5	<	0.010
	M-70	0.000	5	<	0.010
	M-77	0.000	5	<	0.010
	M-81	0.000	5	<	0.010
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.000	95	<	0.002
	M-32	0.042	95	0.001	0.083
	M-33	0.958	95	0.917	0.999
M-40	M-7	0.920	254	0.886	0.954
	M-20	0.000	254	<	0.001
	M-30	0.000	254	<	0.001
	M-50	0.012	254	<	0.023
	M-60	0.034	254	0.012	0.056
	M-77	0.034	254	0.012	0.056
	M-80	0.000	254	<	0.001
	M-81	0.000	254	<	0.001
	M-83	0.000	254	<	0.001
M-50	M-51	0.924	79	0.865	0.983
	M-52	0.013	79	<	0.034
	M-53	0.063	79	0.009	0.117
M-54	M-55	0.000	5	<	0.010
	M-57	1.000	5	0.990	<

TABLE D-54  
GROUP 9 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	3.743	6.179	544	3.223	4.263
M-1 <sup>b</sup>	3.518	4.962	542	3.100	3.936
M-2	2.522	0.818	120	2.374	2.671
M-3	1.489	1.702	200	1.251	1.727
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.271	0.303	200	0.229	0.313
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.217	2.065	251	<	0.432
M-18	1.784	2.829	158	1.339	2.229
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	7.462	7.442	91	5.901	9.023
M-33	1.226	2.005	200	0.946	1.506
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	8.327	5.989	254	7.585	9.069
M-50	17.200	14.601	5	<	32.750
M-53	1.454	2.632	200	1.086	1.822
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or longer.

TABLE D-55  
GROUP 9 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.704	71	0.596	0.812
	J-50	0.296	71	0.188	0.404
J-10 <sup>a</sup>	J-11	0.000	50	<	0.002
	J-12	1.000	50	0.998	<
J-10 <sup>b</sup>	J-11	0.140	50	0.041	0.239
	J-12	0.860	50	0.761	0.959
J-12	J-13	0.000	13	<	0.005
	J-14	1.000	13	0.995	<
J-14	J-15	0.000	120	<	0.002
	J-16	1.000	120	0.998	<
J-16	J-17	0.000	120	<	0.002
	J-18	1.000	120	0.998	<
J-18	J-19	0.000	5,669	<	0.0003
	J-20	1.000	5,669	0.9997	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	5,669	<	0.0003
	J-34	0.000	5,669	0.9997	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.067	17,070	0.063	0.071
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-55 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	21	<	0.004
	J-52	1.000	21	0.996	<
J-50 <sup>b</sup>	J-51	0.000	21	<	0.004
	J-52	1.000	21	0.996	<
J-52	J-53	0.000	217	<	0.001
	J-54	1.000	217	0.999	<
J-54	J-55	0.000	217	<	0.001
	J-56	1.000	217	0.999	<
J-56	J-57	1.000	4,895	0.9997	<
	J-58	0.000	4,895	<	0.0003
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-56  
GROUP 9 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	31.298	57.368	47	14.297	48.299
J-10 <sup>b</sup>	13.450	13.003	40	9.244	17.656
J-12	2.923	3.861	13	0.493	5.353
J-14	3.252	1.828	119	2.919	3.585
J-16	3.092	5.001	120	2.184	4.000
J-18	0.000	0.000	5,669	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.095	0.301	21	<	0.211
J-50 <sup>b</sup>	0.095	0.301	21	<	0.211
J-52	2.226	2.777	217	1.854	2.598
J-54	3.355	3.021	217	2.990	3.760
J-56	0.000	0.000	4,895	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

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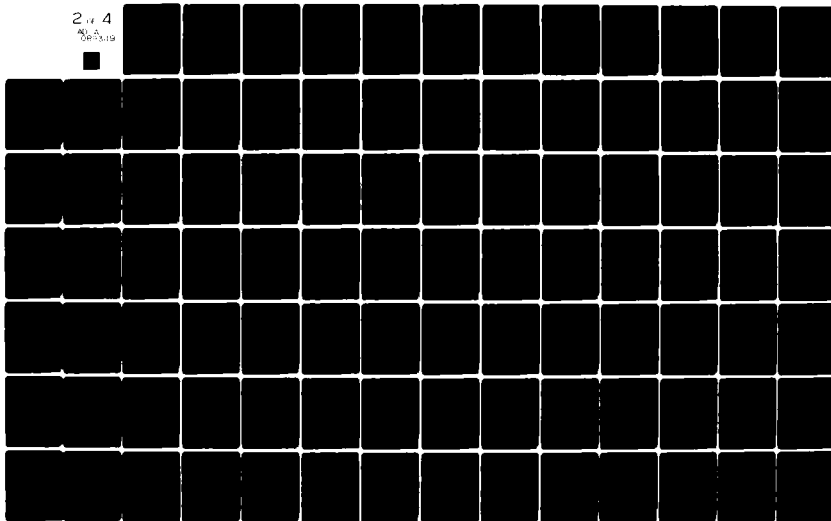
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THE EFFECTIVENESS OF INFORMATION PROCESSING IN JUMPS/WMS. VOLUM--ETC(U)  
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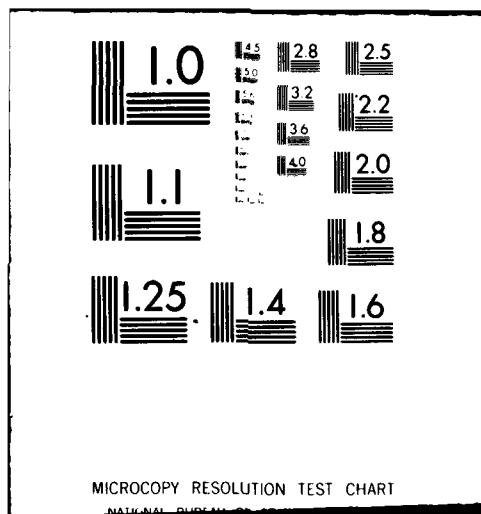
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TAB D-2-4

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 10:  
MARINE AIR CONTROL GROUP TWENTY-EIGHT

TABLE D-57  
GROUP 10 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	399	0.999	<
	M-99	0.000	399	<	0.001
M-1 <sup>b</sup>	M-2	0.985	399	0.973	0.997
	M-99	0.015	399	0.003	0.037
M-4	M-5	0.988	113,367	0.987	0.989
	M-12	0.012	113,367	0.011	0.013
M-6	M-7	0.789	143	0.721	0.857
	M-20	0.043	143	0.009	0.077
	M-30	0.014	143	<	0.030
	M-40	0.047	143	0.012	0.082
	M-50	0.004	143	<	0.013
	M-60	0.003	143	<	0.011
	M-70	0.006	143	<	0.017
	M-77	0.094	143	0.046	0.142
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.894	355	0.862	0.926
	M-20	0.011	355	0.0001	0.0219
	M-30	0.000	355	<	0.001
	M-40	0.003	355	<	0.008
	M-50	0.056	355	0.032	0.080
	M-60	0.000	355	<	0.001
	M-70	0.008	355	<	0.016
	M-77	0.017	355	0.003	0.030
	M-81	0.011	355	0.0001	0.0219
M-17	M-7	0.769	65	0.664	0.874
	M-20	0.000	65	<	0.002
	M-30	0.000	65	<	0.002
	M-40	0.000	65	<	0.002
	M-50	0.046	65	<	0.089
	M-60	0.000	65	<	0.002
	M-70	0.000	65	<	0.002
	M-77	0.185	65	0.089	0.281
	M-81	0.000	65	<	0.002

<sup>a</sup>No restrictions on processing time

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-57 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	1.000	6	0.992	<
	M-20	0.000	6	<	0.008
	M-30	0.000	6	<	0.008
	M-40	0.000	6	<	0.008
	M-50	0.000	6	<	0.008
	M-60	0.000	6	<	0.008
	M-70	0.000	6	<	0.008
	M-77	0.000	6	<	0.008
	M-81	0.000	6	<	0.008
M-19	M-7	0.000	499	<	0.001
	M-20	0.032	499	0.017	0.047
	M-30	0.008	499	<	0.015
	M-40	0.000	499	<	0.001
	M-50	0.036	499	0.020	0.052
	M-60	0.000	499	<	0.001
	M-77	0.924	499	0.901	0.947
M-20	M-21	0.275	499	0.236	0.314
	M-22	0.014	499	0.004	0.024
	M-23	0.711	499	0.671	0.751
M-23	M-24	0.026	13,545	0.023	0.029
	M-25	0.974	13,545	0.971	0.977
M-30	M-31	0.000	67	<	0.002
	M-32	0.030	67	<	0.065
	M-33	0.970	67	0.935	<
M-40	M-7	0.967	152	0.939	0.996
	M-20	0.000	152	<	0.001
	M-30	0.000	152	<	0.001
	M-50	0.007	152	<	0.018
	M-60	0.000	152	<	0.001
	M-77	0.026	152	0.001	0.051
	M-80	0.000	152	<	0.001
	M-81	0.000	152	<	0.001
	M-83	0.000	152	<	0.001
M-50	M-51	0.895	57	0.814	0.976
	M-52	0.000	57	<	0.002
	M-53	0.105	57	0.024	0.186
M-54	M-55	0.000	6	<	0.008
	M-57	1.000	6	0.992	<

TABLE D-58  
GROUP 10 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	7.845	13.548	399	6.507	9.183
M-1 <sup>b</sup>	6.875	11.123	393	5.768	7.982
M-2	2.045	0.869	90	1.862	2.228
M-3	1.489	1.702	200	1.251	1.727
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.271	0.303	200	0.229	0.313
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	0.492	3.245	80	<	1.098
M-18	0.478	1.916	233	0.230	0.726
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	4.277	2.713	65	3.599	4.955
M-33	1.226	2.005	200	0.946	1.506
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	8.178	5.698	152	7.265	9.092
M-50	4.667	2.875	66	3.954	5.380
M-53	1.454	2.632	200	1.086	1.822
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.791	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-59  
GROUP 10 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-2	0.419	62	0.294	0.544
	J-50	0.581	62	0.456	0.706
J-10 <sup>a</sup>	J-11	0.000	26	<	0.003
	J-12	1.000	26	0.997	<
J-10 <sup>b</sup>	J-11	0.077	26	<	0.166
	J-12	0.923	26	0.834	<
J-12	J-13	0.000	14	<	0.005
	J-14	1.000	14	0.995	<
J-14	J-15	0.000	120	<	0.002
	J-16	1.000	120	0.998	<
J-16	J-17	0.000	120	<	0.002
	J-18	1.000	120	0.998	<
J-18	J-19	0.000	5,669	<	0.0003
	J-20	1.000	5,669	0.9997	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	5,669	<	0.0003
	J-34	0.000	5,669	0.9997	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.067	17,070	0.063	0.071
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-59 (CON'T)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-50 <sup>a</sup>	J-51	0.000	36	<	0.003
	J-52	1.000	36	0.997	<
J-50 <sup>b</sup>	J-51	0.000	36	<	0.003
	J-52	1.000	36	0.997	<
J-52	J-53	0.000	217	<	0.001
	J-54	1.000	217	0.999	<
J-54	J-55	0.000	217	<	0.001
	J-56	1.000	217	0.999	<
J-56	J-57	1.000	4,895	0.9997	<
	J-58	0.000	4,895	<	0.0003
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-60  
GROUP 10 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	19.769	18.962	26	11.957	29.581
J-10 <sup>b</sup>	15.625	12.541	24	19.212	21.038
J-12	5.857	5.051	14	2.831	8.883
J-14	3.252	1.828	119	2.919	3.585
J-16	3.092	5.001	120	2.184	4.000
J-18	0.000	0.000	5,669	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.500	1.797	36	<	1.013
J-50 <sup>b</sup>	0.500	1.797	36	<	1.013
J-52	2.226	2.777	217	1.854	2.598
J-54	3.355	3.021	217	2.950	3.760
J-56	0.000	0.000	4,895	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.



TAB D-2-5

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 11:  
MARINE AIR GROUP THIRTY-TWO

TABLE D-61  
GROUP 11 MMS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-1 <sup>a</sup>	M-2	1.000	417	.999	<
	M-99	0.000	417	<	.001
M-1 <sup>b</sup>	M-2	0.856	417	.822	.890
	M-99	0.144	417	.110	.178
M-4	M-5	0.988	113,367	.987	.989
	M-12	0.012	113,367	.011	.013
M-6	M-7	0.824	129	.758	.890
	M-20	0.048	129	.011	.085
	M-30	0.006	129	<	.017
	M-40	0.015	129	<	.033
	M-50	0.007	129	<	.019
	M-60	0.003	129	<	.011
	M-70	0.006	129	<	.017
	M-77	0.091	129	<	.133
M-9	M-10	0.999	582,635	.9989	<
	M-91	0.001	582,635	<	.0011
M-10	M-11	0.966	989,486	.9657	.9663
	M-91	0.034	989,486	.0336	.0344
M-16	M-7	0.394	355	.862	.926
	M-20	0.011	355	.0001	.0219
	M-30	0.000	355	<	.001
	M-40	0.003	355	<	.008
	M-50	0.056	355	.032	.080
	M-60	0.000	355	<	.001
	M-70	0.008	355	<	.016
	M-77	0.017	355	.003	.030
	M-81	0.011	355	.0001	.0219
M-17	M-7	0.931	43	.866	<
	M-20	0.000	43	<	.003
	M-30	0.000	43	<	.003
	M-40	0.000	43	<	.003
	M-50	0.023	43	<	.061
	M-60	0.000	43	<	.003
	M-70	0.023	43	<	.061
	M-77	0.023	43	<	.061
	M-81	0.000	43	<	.003

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-61 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	1.000	7	.993	<
	M-20	0.000	7	<	.007
	M-30	0.000	7	<	.007
	M-40	0.000	7	<	.007
	M-50	0.000	7	<	.007
	M-60	0.000	7	<	.007
	M-70	0.000	7	<	.007
	M-77	0.000	7	<	.007
	M-81	0.000	7	<	.007
M-19	M-7	0.000	499	<	.001
	M-20	0.032	499	.017	.047
	M-30	0.008	499	<	.015
	M-40	0.000	499	<	.001
	M-50	0.036	499	.020	.052
	M-60	0.000	499	<	.001
	M-77	0.924	499	.901	.947
M-20	M-21	0.275	499	.236	.314
	M-22	0.014	499	.004	.024
	M-23	0.711	499	.671	.751
M-23	M-24	0.026	13,545	.023	.029
	M-25	0.974	13,545	.971	.977
M-30	M-31	0.000	44	<	.003
	M-32	0.023	44	<	.061
	M-33	0.977	44	.939	<
M-40	M-7	0.951	122	.912	.990
	M-20	0.000	122	<	.002
	M-30	0.000	122	<	.002
	M-50	0.008	122	<	.021
	M-60	0.016	122	<	.035
	M-77	0.025	122	<	.048
	M-80	0.000	122	<	.002
	M-81	0.000	122	<	.002
	M-83	0.000	122	<	.002
M-50	M-51	0.825	40	.704	.946
	M-52	0.000	40	<	.003
	M-53	0.175	40	.054	.296
M-54	M-55	0.000	7	<	.007
	M-57	1.000	7	.993	<

TABLE D-62  
GROUP 11 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	18.893	29.657	410	16.004	21.786
M-1 <sup>b</sup>	8.166	14.481	350	6.639	9.693
M-2	1.036	0.190	92	0.996	1.076
M-3	1.489	1.702	200	1.251	1.727
M-4	2.000	0.107	113,367	1.999	2.001
M-6	0.271	0.303	200	0.229	0.313
M-7	0.938	0.791	195	0.826	1.050
M-8	1.705	2.175	372	1.483	1.927
M-12	2.670	10.128	349	1.600	3.740
M-16	1.220	3.628	341	0.832	1.608
M-17	3.141	14.033	40	<	6.917
M-18	0.355	1.772	243	0.131	0.579
M-19	0.665	0.013	100	0.662	0.668
M-20	1.728	1.469	334	1.569	1.887
M-23	2.000	0.107	113,367	1.999	2.001
M-24	2.670	10.128	349	1.600	3.740
M-30	11.047	12.926	43	7.018	15.076
M-33	1.226	2.005	200	0.946	1.506
M-34	2.000	0.107	113,367	1.999	2.001
M-35	2.670	10.128	349	1.600	3.740
M-40	8.787	6.967	122	7.533	10.041
M-50	10.571	5.503	7	5.067	16.075
M-53	1.454	2.632	200	1.086	1.822
M-54	2.000	0.107	113,367	1.999	2.001
M-55	2.670	10.128	349	1.600	3.740
M-77	0.938	0.741	195	0.826	1.050
M-91	0.385	0.141	100	0.357	0.413

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-63

## GROUP 11 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.389	54	.256	.522
	J-50	0.611	54	.478	.744
J-10 <sup>a</sup>	J-11	0.000	21	<	.004
	J-12	1.000	21	.996	<
J-10 <sup>b</sup>	J-11	0.095	21	<	.205
	J-12	0.905	21	.795	<
J-12	J-13	0.000	19	<	.004
	J-14	1.000	19	.996	<
J-14	J-15	0.000	120	<	.002
	J-16	1.000	120	.998	<
J-16	J-17	0.000	120	<	.002
	J-18	1.000	120	.998	<
J-18	J-19	0.000	5,669	<	.0003
	J-20	1.000	5,669	.9997	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	5,669	<	.0003
	J-34	0.000	5,669	.9997	<
J-30	J-32	0.982	8,327	.979	.985
	J-33	0.018	8,327	.015	.021
J-34	J-35	0.034	8,179	.030	.038
	J-99	0.966	8,179	.962	.970
J-36	J-37	0.067	17,070	.063	.071
	J-38	0.931	17,070	.927	.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-63 (CON'T)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-50 <sup>a</sup>	J-51	0.000	33	<	0.003
	J-52	1.000	33	0.997	<
J-50 <sup>b</sup>	J-51	0.000	33	<	0.003
	J-52	1.000	33	0.997	<
J-52	J-53	0.000	217	<	0.001
	J-54	1.000	217	0.999	<
J-54	J-55	0.000	217	<	0.001
	J-56	1.000	217	0.999	<
J-56	J-57	1.000	4,895	0.9997	<
	J-58	0.000	4,895	<	0.0003
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	294,189	0.025	0.027
	J-99	0.974	294,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-64  
GROUP 11 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	20.400	29.666	29	6.176	34.624
J-10 <sup>b</sup>	11.278	8.393	18	6.983	15.573
J-12	9.263	12.467	19	3.092	15.434
J-14	3.252	1.828	119	2.919	3.585
J-16	3.092	5.001	120	2.184	4.000
J-18	0.000	0.000	5,669	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.364	1.194	33	<	0.721
J-50 <sup>b</sup>	0.364	1.194	33	<	0.721
J-52	2.226	2.777	217	1.854	2.598
J-54	3.355	3.021	217	2.950	3.760
J-56	0.000	0.000	4,895	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

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ANNEX D-3

DETAILED RESULTS FOR DATA GROUPS 12 THROUGH 17



ANNEX D-3

DETAILED RESULTS FOR DATA GROUPS 12 THROUGH 17

This annex contains the detailed results of our analysis of information processing in JUMPS/MMS for the following data groups:

<u>Group</u>	<u>Unit</u>	<u>DSSN</u>	<u>SDPI</u>
12	MCB, Camp Pendleton	5167	03
13	First FSSG	6187	03
14	First Marines	6187	03
15	Fifth Marines	6187	03
16	Seventh Marines	6187	03
17	Eleventh Marines	6187	03

TABLE D-65

MMS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group					
	12	13	14	15	16	17
Event not reported						
Unrestricted	0.000	0.000	0.000	0.000	0.000	0.000
Restricted	0.083	0.087	0.082	0.071	0.081	0.079
Primary distribution of reported events						
Accepted - passed to KC in UTR para. 1/7	0.893	0.952	0.957	0.952	0.884	0.965
Rejected to RU in UTR para. 2/6	0.006	0.008	0.007	0.000	0.007	0.007
Rejected to ACU	0.057	0.016	0.007	0.018	0.061	0.007
Deleted (UTR para. 4)	0.000	0.000	0.007	0.006	0.000	0.000
Advisory message (UTR para. 5)	0.006	0.000	0.007	0.006	0.007	0.007
Suspense file	0.038	0.016	0.014	0.000	0.034	0.007
ACU/SDPI loss	0.000	0.008	0.007	0.018	0.007	0.007
UTR. para. 2/6 entry not resubmitted	0.037	0.011	0.038	0.006	0.007	0.006
UTR. para. 5 entry not resubmitted	0.040	0.004	0.012	0.008	0.022	0.006
CDPA/MCFC edit - poster failures						
Edit failures	0.001	0.001	0.001	0.001	0.001	0.001
Poster failures	0.034	0.034	0.034	0.034	0.034	0.034

TABLE D-66  
MMS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

Outcome	Group						
	12	13	14	15	16	17	
Event not reported	0.000	0.000	0.000	0.000	0.000	0.000	
UTR para. 2/6 entry - not corrected	0.000	0.000	0.000	0.000	0.000	0.000	
UTR para. 5 entry - not corrected	0.001	0.000	0.000	0.000	0.000	0.000	
Rejected to RU - no action required	0.014	0.006	0.011	0.011	0.014	0.010	
UTR para. 4 entry	0.005	0.000	0.008	0.009	0.003	0.001	
Scanner reject - not corrected	0.000	0.000	0.000	0.000	0.000	0.000	
Edit reject - not corrected	0.002	0.001	0.000	0.001	0.002	0.000	
Lost in edit	0.005	0.009	0.008	0.002	0.012	0.008	
Rejected to ACU - no action required	0.027	0.008	0.004	0.009	0.029	0.004	
Lost in suspense file	0.000	0.000	0.000	0.000	0.000	0.000	
Posted to CMR	0.945	0.975	0.973	0.968	0.937	0.977	

TABLE D-67

## AVERAGE MMS TIMES (DAYS) FOR SELECTED TRANSITIONS

Transition	Group						
	12	13	14	15	16	17	
From event to Unit Diary							
Unrestricted	19.88	20.72	20.75	17.66	20.81	20.82	
Restricted	10.54	11.25	10.79	10.38	12.71	10.74	
From UD to ACU scanning	1.78	1.90	2.62	2.76	2.22	2.78	
From ACU scan to UTR	0.24	0.24	0.24	0.24	0.24	0.24	
From UTR para. 2/6 to RU resubmission	4.08	6.73	5.41	4.44	4.65	5.04	
From UTR para. 5 to RU resubmission	11.04	10.39	9.89	9.93	7.73	6.18	
From suspense file to suspense file	12.26	11.46	10.97	14.69	10.35	12.83	
From rejection to ACU to ACU resubmission	0.95	0.95	0.95	0.95	0.95	0.95	
From rejection to ACU to AUTODIN entry	5.43	5.63	5.40	5.47	5.48	5.58	
From ACU scan to CDPA edit	3.47	3.17	3.11	3.15	3.41	3.06	
From AUTODIN entry to CDPA edit	2.64	2.64	2.64	2.64	2.64	2.64	
From CDPA receipt to CMR posting	1.87	1.87	1.87	1.87	1.87	1.87	
Event occurrence to CMR posting	26.91	27.58	28.26	25.35	28.21	28.44	

TABLE D-68  
CUMULATIVE PROBABILITY DISTRIBUTION OF MMS TIMES  
FOR TRANSITION FROM EVENT TO UNIT DIARY

Time (days)	Group					
	12	13	14	15	16	17
0	0.111	0.115	0.107	0.137	0.070	0.081
1	0.187	0.183	0.189	0.232	0.159	0.155
2	0.298	0.258	0.290	0.323	0.203	0.226
3	0.395	0.322	0.356	0.391	0.297	0.343
4	0.446	0.404	0.419	0.456	0.371	0.438
5	0.490	0.465	0.471	0.484	0.414	0.500
6	0.538	0.521	0.515	0.524	0.464	0.540
7	0.563	0.549	0.553	0.550	0.490	0.577
8	0.593	0.567	0.575	0.573	0.500	0.603
10	0.627	0.614	0.612	0.605	0.550	0.651
15	0.698	0.702	0.706	0.694	0.639	0.720
20	0.738	0.738	0.750	0.774	0.719	0.764
30	0.810	0.787	0.813	0.851	0.789	0.812
40	0.887	0.857	0.873	0.885	0.867	0.869
50	0.903	0.903	0.901	0.903	0.892	0.897
75	0.940	0.934	0.940	0.946	0.936	0.940
100	0.954	0.946	0.954	0.956	0.964	0.948
125	0.968	0.962	0.966	0.976	0.986	0.966
218	0.994	0.996	0.990	1.000	0.994	0.986
245	0.998	1.000	0.992	---	0.996	0.992
281	1.000	---	0.996	---	0.996	0.994
320	---	---	0.996	---	1.000	0.998
346	---	---	0.996	---	---	1.000
363	---	---	1.000	---	---	---

TABLE D-69

JUMPS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group					
	12	13	14	15	16	17
Primary separation						
ABA event	0.327	0.402	0.288	0.278	0.419	0.350
TODE event	0.673	0.598	0.712	0.722	0.581	0.650
ABA event not reported	0.000	0.000	0.000	0.000	0.009	0.000
ABA lost at DO	0.000	0.000	0.000	0.000	0.000	0.000
ABA decentrally processed	1.000	1.000	1.000	1.000	1.000	1.000
ABA read by scanner	0.942	0.969	0.969	0.969	0.969	0.969
ABA scanner rejects lost	0.330	0.330	0.330	0.330	0.330	0.330
TODE event not reported	0.000	0.000	0.000	0.000	0.000	0.000
TODE document lost at DO	0.000	0.000	0.000	0.000	0.000	0.000
TODE lost at DO	0.000	0.000	0.000	0.000	0.000	0.000
TODE decentrally processed	1.000	1.000	1.000	1.000	1.000	1.000
TODE read by scanner	0.955	0.964	0.964	0.964	0.964	0.964
TODE scanner rejects lost	0.328	0.328	0.328	0.328	0.328	0.328
MCFC scanner rejects of ABA	0.078	0.078	0.078	0.078	0.078	0.078
MCFC posting failure for ABA	0.041	0.041	0.041	0.041	0.041	0.041
MCFC scanner reject of TODE	0.018	0.018	0.018	0.018	0.018	0.018
MCFC posting failure for TODE	0.034	0.034	0.034	0.034	0.034	0.034

TABLE D-70  
JUMPS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

<u>Outcome</u>	<u>Group</u>				
	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>
ABA event not reported	0.000	0.002	0.000	0.000	0.009
ABA lost at DO	0.058	0.031	0.031	0.031	0.031
ABA rejected at MCFC - not resubmitted	0.002	0.002	0.002	0.002	0.002
TODE event not reported	0.000	0.000	0.000	0.000	0.000
TODE document lost at RU	0.002	0.000	0.000	0.000	0.000
TODE document lost at DO	0.000	0.000	0.000	0.000	0.000
TODE lost at DO	0.000	0.000	0.000	0.000	0.000
TODE rejected at ACU - lost	0.015	0.013	0.013	0.013	0.013
TODE rejected at MCFC - lost	0.001	0.001	0.001	0.001	0.001
ABA posted to MMPA	0.940	0.965	0.967	0.967	0.958
TODE posted to MMPA	0.981	0.986	0.986	0.986	0.986

TABLE D-71

## AVERAGE JUMPS TIMES (DAYS) FOR SELECTED ABA TRANSITIONS

<u>Transition</u>	<u>Group</u>					
	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>
From ABA event to ABA						
Unrestricted	1.50	1.50	0.81	0.59	0.78	0.98
Restricted	0.99	0.99	0.81	0.59	0.43	0.98
From ABA preparation to receipt at DO	4.48	4.42	4.42	4.42	4.42	4.42
From ABA receipt at DO to DTL	4.20	5.89	5.89	5.89	5.89	5.89
From DTL preparation to decentral scan	1.92	0.00	0.00	0.00	0.00	0.00
From decentral scan to mailing	10.82	0.00	0.00	0.00	0.00	0.00
From DTL preparation to mailing	13.34	0.97	0.97	0.97	0.97	0.97
From ABA receipt at MCFC to central scan	0.64	0.64	0.64	0.64	0.64	0.64
From central scan to posting to MMPA	0.00	0.00	0.00	0.00	0.00	0.00
From receipt at MCFC to posting	1.29	1.25	1.25	1.25	1.25	1.25
From ABA event to posting to MMPA	28.53	15.62	15.43	15.20	15.39	15.60



TABLE D-72

## AVERAGE JUMPS TIMES (DAYS) FOR SELECTED TODE TRANSITIONS

<u>Transition</u>	<u>Group</u>					
	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>
From TODE event to TODE document						
Unrestricted	34.73	15.80	23.95	25.40	20.37	16.23
Restricted	6.52	6.42	11.08	9.59	9.59	8.69
From TODE document preparation to receipt at DO	10.99	12.89	9.44	11.58	11.69	16.92
From document receipt at DO to TODE	2.74	1.76	1.76	1.76	1.76	1.76
From TODE to DTL preparation	2.21	4.29	4.29	4.29	4.29	4.29
From DTL preparation to decentral scan	0.90	0.00	0.00	0.00	0.00	0.00
From decentral scan to mailing	7.26	7.77	7.77	7.77	7.77	7.77
From DTL preparation to mailing	9.20	8.05	8.05	8.05	8.05	8.05
From TODE receipt at MCFC to central scan	1.06	1.06	1.06	1.06	1.06	1.06
From central scan to posting to MMPA	0.01	0.01	0.01	0.01	0.01	0.01
From receipt at MCFC to posting to MMPA	1.14	1.14	1.14	1.14	1.14	1.14
From TODE event to posting to MMPA	65.72	47.54	52.24	55.82	50.90	52.00

TABLE D-73

CUMULATIVE PROBABILITY DISTRIBUTION OF JUMPS TIMES  
FOR TRANSITION FROM TODE EVENT TO TODE DOCUMENT

Time (days)	Group				
	12	13	14	15	16
0	0.534	0.429	0.308	0.346	0.302
1	0.561	0.527	0.374	0.386	0.362
2	0.585	0.569	0.401	0.398	0.405
3	0.601	0.608	0.438	0.445	0.444
4	0.615	0.631	0.460	0.475	0.477
5	0.630	0.652	0.482	0.507	0.499
6	0.644	0.677	0.507	0.533	0.532
7	0.656	0.692	0.524	0.561	0.547
8	0.662	0.698	0.529	0.567	0.559
10	0.670	0.735	0.568	0.606	0.600
15	0.684	0.788	0.634	0.658	0.683
20	0.700	0.825	0.703	0.716	0.748
30	0.747	0.867	0.764	0.795	0.818
40	0.785	0.888	0.793	0.827	0.866
50	0.800	0.906	0.822	0.859	0.894
75	0.834	0.948	0.905	0.895	0.926
100	0.866	0.960	0.956	0.918	0.954
125	0.897	0.977	0.967	0.948	0.969
150	0.921	0.983	0.982	0.966	0.974
200	0.947	0.988	0.989	0.978	0.990
266	0.974	0.992	0.996	0.994	0.998
329	0.992	1.000	0.998	0.996	0.998
362	0.994	--	0.998	0.998	1.000
365	1.000	--	1.000	1.000	--

TAB D-3-1

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 12:  
MARINE CORPS BASE, CAMP PENDLETON, CALIFORNIA

TABLE D-74  
GROUP 12 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	504	0.999	<
	M-99	0.000	504	<	0.001
M-1 <sup>b</sup>	M-2	0.917	504	0.893	0.941
	M-99	0.083	504	0.059	0.107
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.879	157	0.328	0.930
	M-20	0.057	157	0.021	0.093
	M-30	0.006	157	<	0.016
	M-40	0.039	157	0.009	0.069
	M-50	0.006	157	<	0.016
	M-60	0.000	157	<	0.001
	M-70	0.000	157	<	0.001
	M-77	0.013	157	<	0.028
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.253	178	0.189	0.317
	M-20	0.034	178	0.007	0.061
	M-30	0.017	178	<	0.033
	M-40	0.017	178	<	0.033
	M-50	0.034	178	0.007	0.061
	M-60	0.000	178	<	0.001
	M-70	0.000	178	<	0.001
	M-77	0.516	178	0.442	0.590
	M-81	0.129	178	0.080	0.179

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-74 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.525	78	0.413	0.638
	M-20	0.013	78	<	0.034
	M-30	0.013	78	<	0.034
	M-40	0.013	78	<	0.034
	M-50	0.064	78	0.009	0.119
	M-60	0.000	78	<	0.002
	M-70	0.013	78	<	0.034
	M-77	0.359	78	0.251	0.467
	M-81	0.000	78	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	0.0002	0.0158
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.016	188	<	0.031
	M-32	0.037	188	0.010	0.064
	M-33	0.947	188	0.915	0.979
M-40	M-7	0.647	280	0.591	0.703
	M-20	0.046	280	0.021	0.071
	M-30	0.000	280	<	0.001
	M-50	0.025	280	0.007	0.043
	M-60	0.125	280	0.086	0.164
	M-77	0.157	280	0.114	0.200
	M-80	0.000	280	<	0.001
	M-81	0.000	280	<	0.001
M-50	M-51	0.804	500	0.769	0.839
	M-52	0.040	500	0.023	0.058
	M-53	0.156	500	0.124	0.188
M-54	M-55	0.013	78	<	0.034
	M-57	0.987	78	0.966	<

TABLE D-75  
GROUP 12 NMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. Dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	19.879	37.279	504	16.621	23.137
M-1 <sup>b</sup>	10.537	12.965	462	9.347	11.727
M-2	1.492	0.849	150	1.354	1.630
M-3	0.284	0.550	300	0.221	0.347
M-4	1.619	1.217	70,709	1.610	1.628
M-6	0.242	0.217	300	0.217	0.267
M-7	0.772	0.482	400	0.724	0.820
M-8	1.371	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	0.416	2.171
M-17	1.814	3.691	178	1.268	2.361
M-18	1.264	3.116	77	0.553	1.975
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.217	70,709	1.610	1.628
M-24	0.249	0.834	261	0.147	0.351
M-30	4.084	11.546	178	2.374	5.794
M-33	0.407	0.578	300	0.341	0.473
M-34	1.619	1.217	70,709	1.610	1.628
M-35	0.249	0.834	261	0.147	0.351
M-40	12.264	12.793	280	10.755	13.773
M-50	11.038	20.120	78	6.475	15.601
M-53	0.968	1.201	300	0.831	1.105
M-54	1.619	1.217	70,709	1.610	1.628
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-76

## GROUP 12 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.673	311	0.621	0.725
	J-50	0.327	311	0.275	0.379
J-10 <sup>a</sup>	J-11	0.000	516	<	0.001
	J-12	1.000	516	0.999	<
J-10 <sup>b</sup>	J-11	0.000	516	<	0.001
	J-12	1.000	516	0.999	<
J-12	J-13	0.002	498	<	0.005
	J-14	0.998	498	0.995	<
J-14	J-15	0.000	1,000	<	0.001
	J-16	1.000	1,000	0.999	<
J-16	J-17	0.000	1,000	<	0.001
	J-18	1.000	1,000	0.999	<
J-18	J-19	1.000	42,272	0.9998	<
	J-20	0.000	42,272	<	0.0002
J-21	J-22	0.000	42,272	<	0.0002
	J-23	0.955	42,272	0.953	0.957
	J-24	0.045	42,272	0.043	0.047
J-24	J-25	0.328	125	0.245	0.411
	J-26	0.672	125	0.589	0.755
J-29	J-30	0.000	42,272	<	0.0002
	J-34	1.000	42,272	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-76 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	165	<	0.001
	J-52	1.000	165	0.999	<
J-50 <sup>b</sup>	J-51	0.012	165	<	0.026
	J-52	0.988	165	0.974	<
J-52	J-53	0.000	1,001	<	0.001
	J-54	1.000	1,001	0.999	<
J-54	J-55	0.000	1,001	<	0.001
	J-56	1.000	1,001	0.999	<
J-56	J-57	0.000	1,095	<	0.001
	J-58	1.000	1,095	0.999	<
J-59	J-60	0.942	32,089	0.939	0.945
	J-61	0.058	32,089	0.055	0.061
	J-62	0.000	32,089	<	0.0002
J-62	J-63	0.330	100	0.237	0.423
	J-64	0.670	100	0.677	0.763
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.085
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.



TABLE D-77  
GROUP 12 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	34.733	70.334	494	28.524	40.942
J-10 <sup>b</sup>	6.521	13.492	403	5.199	7.843
J-12	10.992	14.958	495	9.673	12.311
J-14	2.739	2.988	498	2.476	3.002
J-16	2.206	2.081	496	2.023	2.389
J-18	0.895	2.320	42,272	0.873	0.917
J-21	0.639	1.772	42,272	0.622	0.656
J-23	7.261	3.918	42,272	7.224	7.298
J-24	3.274	3.743	84	2.456	4.092
J-26	8.060	6.496	84	6.641	9.479
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	1.502	3.664	165	0.938	2.066
J-50 <sup>b</sup>	0.989	1.002	163	0.834	1.444
J-52	4.481	4.987	497	4.042	4.920
J-54	4.204	3.948	500	3.858	4.550
J-56	1.916	5.806	1,095	1.572	2.260
J-50	0.604	0.489	1,095	0.575	0.633
J-60	10.815	8.856	1,095	10.290	11.340
J-62	5.111	3.992	63	4.097	6.125
J-64	4.136	5.288	66	2.824	5.448
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-3-2

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 13:  
FIRST FORCE SERVICE SUPPORT GROUP

TABLE D-73  
GROUP 13 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	503	0.999	<
	M-99	0.000	503	<	0.001
M-1 <sup>b</sup>	M-2	0.913	503	0.888	0.938
	M-99	0.087	503	0.062	0.112
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.929	128	0.884	0.974
	M-20	0.016	128	<	0.034
	M-30	0.008	128	<	0.021
	M-40	0.016	128	<	0.034
	M-50	0.000	128	<	0.002
	M-60	0.000	128	<	0.002
	M-70	0.008	128	<	0.021
	M-77	0.023	128	0.001	0.045
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.480	467	0.435	0.526
	M-20	0.030	467	0.015	0.046
	M-30	0.032	467	0.016	0.048
	M-40	0.000	467	<	0.001
	M-50	0.039	467	0.021	0.057
	M-60	0.006	467	<	0.012
	M-70	0.000	467	<	0.001
	M-77	0.343	467	0.300	0.386
	M-81	0.069	467	0.046	0.092

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-78 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.638	113	0.549	0.728
	M-20	0.071	113	0.023	0.119
	M-30	0.062	113	0.017	0.107
	M-40	0.044	113	0.006	0.082
	M-50	0.097	113	0.042	0.152
	M-60	0.000	113	<	0.002
	M-70	0.053	113	0.011	0.095
	M-77	0.035	113	0.001	0.069
	M-81	0.000	113	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	0.0002	0.0158
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.002	473	<	0.005
	M-32	0.011	473	0.002	0.020
	M-33	0.987	473	0.977	0.997
M-40	M-7	0.823	435	0.787	0.859
	M-20	0.016	435	0.004	0.028
	M-30	0.002	435	<	0.006
	M-50	0.014	435	0.003	0.025
	M-60	0.053	435	0.032	0.074
	M-77	0.062	435	0.039	0.085
	M-80	0.009	435	<	0.016
	M-81	0.000	435	<	0.001
	M-83	0.021	435	0.007	0.035
M-50	M-51	0.772	504	0.735	0.809
	M-52	0.004	504	<	0.009
	M-53	0.224	504	0.188	0.260
M-54	M-55	0.080	113	0.029	0.131
	M-57	0.920	113	0.870	0.971

TABLE D-79  
GROUP 13 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	20.722	36.107	503	17.563	23.881
M-1 <sup>b</sup>	11.253	13.633	459	9.998	12.508
M-2	1.619	1.488	80	1.286	1.952
M-3	0.284	0.550	300	0.221	0.347
M-4	1.619	1.217	70,709	1.610	1.628
M-6	0.242	0.217	300	0.217	0.267
M-7	0.772	0.482	400	0.724	0.820
M-8	1.781	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	1.429	3.143	513	1.157	1.701
M-18	1.391	3.089	106	0.794	1.988
M-19	0.654	0.253	66	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.217	70,709	1.610	1.628
M-24	0.249	0.834	261	0.147	0.351
M-30	6.730	17.987	463	5.081	8.379
M-33	0.407	0.578	300	0.341	0.473
M-34	1.619	1.217	70,709	1.610	1.628
M-35	0.249	0.834	261	0.147	0.351
M-40	11.456	13.618	430	10.161	12.751
M-50	10.393	17.127	112	7.174	13.612
M-53	0.968	1.201	300	0.831	1.105
M-54	1.619	1.217	70,709	1.610	1.628
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-80  
GROUP 13 JUMPS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-1	J-10	0.598	187	0.527	0.669
	J-50	0.402	187	0.331	0.473
J-10 <sup>a</sup>	J-11	0.000	486	<	0.001
	J-12	1.000	486	0.999	<
J-10 <sup>b</sup>	J-11	0.078	486	0.054	0.102
	J-12	0.922	486	0.898	0.946
J-12	J-13	0.000	486	<	0.001
	J-14	1.000	486	0.999	<
J-14	J-15	0.000	1,000	<	0.001
	J-16	1.000	1,000	0.999	<
J-16	J-17	0.000	1,000	<	0.001
	J-18	1.000	1,000	0.999	<
J-18	J-19	1.000	43,213	0.9998	<
	J-20	0.000	43,213	<	0.0002
J-21	J-22	0.001	43,213	0.0007	0.0013
	J-23	0.964	43,213	0.962	0.966
	J-24	0.035	43,213	0.033	0.037
J-24	J-25	0.328	125	0.245	0.411
	J-26	0.672	125	0.589	0.755
J-29	J-30	0.000	43,213	<	0.0002
	J-34	1.000	43,213	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-80 (CONT'D)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-50 <sup>a</sup>	J-51	0.000	165	<	0.002
	J-52	1.000	165	0.998	<
J-50 <sup>b</sup>	J-51	0.012	165	<	0.026
	J-52	0.988	165	0.974	<
J-52	J-53	0.000	1,001	<	0.001
	J-54	1.000	1,001	0.999	<
J-54	J-55	0.000	1,001	<	0.001
	J-56	1.000	1,001	0.999	<
J-56	J-57	0.000	32,089	<	0.0002
	J-58	1.000	32,089	0.9998	<
J-59	J-60	0.969	32,089	0.967	0.971
	J-61	0.031	32,089	0.029	0.033
	J-62	0.000	32,089	<	0.0002
J-62	J-63	0.330	100	0.237	0.425
	J-64	0.670	100	0.577	0.763
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-81  
GROUP 13 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	15.800	40.387	480	12.183	19.417
J-10 <sup>b</sup>	6.421	11.680	442	5.325	7.517
J-12	12.892	20.133	352	10.775	15.009
J-14	1.756	4.371	499	1.372	2.140
J-16	4.288	3.560	500	3.976	4.600
J-18	0.000	0.000	43,213	0.000	0.000
J-21	0.003	0.054	43,213	0.002	0.004
J-23	7.769	3.945	43,213	7.732	7.806
J-24	3.274	3.743	84	2.456	4.092
J-26	8.060	6.496	84	6.641	9.479
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	1.502	3.664	165	0.938	2.066
J-50 <sup>b</sup>	0.989	2.131	163	0.659	1.319
J-52	4.423	6.926	499	3.815	5.031
J-54	5.893	4.926	497	5.460	6.327
J-56	0.000	0.000	32,089	0.000	0.000
J-59	1.997	0.251	32,089	1.994	2.000
J-60	0.000	0.000	32,089	0.000	0.000
J-62	5.111	3.992	63	4.097	6.125
J-64	4.136	5.288	66	2.824	5.448
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.



TAB D-3-3

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 14:  
FIRST MARINE REGIMENT

TABLE D-82

## GROUP 14 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	503	0.999	<
	M-99	0.000	503	<	0.001
M-1 <sup>b</sup>	M-2	0.918	503	0.894	0.942
	M-99	0.082	503	0.058	0.106
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.929	138	0.836	0.972
	M-20	0.007	138	<	0.019
	M-30	0.007	138	<	0.019
	M-40	0.014	138	<	0.031
	M-50	0.007	138	<	0.019
	M-60	0.007	138	<	0.019
	M-70	0.007	138	<	0.019
	M-77	0.022	138	<	0.043
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.445	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.528	330	0.474	0.532
	M-20	0.015	330	0.002	0.028
	M-30	0.030	330	0.012	0.049
	M-40	0.006	330	<	0.013
	M-50	0.024	330	0.007	0.041
	M-60	0.006	330	<	0.013
	M-70	0.009	330	<	0.018
	M-77	0.242	330	0.196	0.288
	M-81	0.139	330	0.102	0.177

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing times restricted to 60 days or less.

TABLE D-82 CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.852	81	0.774	0.931
	M-20	0.037	81	<	0.072
	M-30	0.000	81	<	0.002
	M-40	0.012	81	<	0.032
	M-50	0.074	81	0.016	0.132
	M-60	0.000	81	<	0.002
	M-70	0.000	81	<	0.002
	M-77	0.025	81	<	0.054
	M-81	0.000	81	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	0.0002	0.0158
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.003	344	<	0.006
	M-32	0.038	344	0.018	0.058
	M-33	0.959	344	0.938	0.980
M-40	M-7	0.821	402	0.783	0.859
	M-20	0.010	402	0.0002	0.0198
	M-30	0.000	402	<	0.001
	M-50	0.022	402	0.008	0.036
	M-60	0.070	402	0.045	0.095
	M-77	0.060	402	0.037	0.083
	M-80	0.005	402	<	0.011
	M-81	0.000	402	<	0.001
	M-83	0.012	402	0.001	0.023
M-50	M-51	0.827	504	0.794	0.860
	M-52	0.012	504	0.002	0.022
	M-53	0.161	504	0.129	0.193
M-54	M-55	0.037	81	0.002	0.072
	M-57	0.963	81	0.928	0.998

TABLE D-83  
GROUP 14 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	20.751	41.239	503	17.143	24.359
M-1 <sup>b</sup>	10.792	13.019	462	9.598	11.987
M-2	2.343	1.146	80	2.086	2.600
M-3	0.284	0.550	300	0.221	0.347
M-4	1.619	1.217	70,709	1.610	1.628
M-6	0.242	0.217	300	0.217	0.267
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	1.918	4.567	337	1.427	2.409
M-18	1.181	2.366	82	0.658	1.704
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.217	70,709	1.610	1.628
M-24	0.249	0.834	261	0.147	0.351
M-30	5.409	9.885	330	4.335	6.483
M-33	0.407	0.578	300	0.341	0.473
M-34	1.619	1.217	70,709	1.610	1.628
M-35	0.249	0.834	261	0.147	0.351
M-40	10.968	13.513	400	9.635	12.301
M-50	9.887	13.875	81	6.800	12.974
M-53	0.968	1.201	300	0.831	1.105
M-54	1.619	1.217	70,709	1.610	1.628
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-84

## GROUP 14 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.712	163	0.642	0.782
	J-50	0.288	163	0.218	0.358
J-10 <sup>a</sup>	J-11	0.000	461	<	0.001
	J-12	1.000	461	0.999	<
J-10 <sup>b</sup>	J-11	0.130	461	0.099	0.161
	J-12	0.870	461	0.839	0.901
J-12	J-13	0.000	165	<	0.001
	J-14	1.000	165	0.999	<
J-14	J-15	0.000	1,000	<	0.001
	J-16	1.000	1,000	0.999	<
J-16	J-17	0.000	1,000	<	0.001
	J-18	1.000	1,000	0.999	<
J-18	J-19	1.000	43,213	0.9998	0.0002
	J-20	0.000	43,213	<	<
J-21	J-22	0.001	43,213	0.0007	0.0013
	J-23	0.964	43,213	0.962	0.966
	J-24	0.035	43,213	0.033	0.037
J-24	J-25	0.328	125	0.245	0.411
	J-26	0.672	125	0.589	0.755
J-29	J-30	0.000	43,213	<	0.0002
	J-34	1.000	43,213	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-84 (CON'T)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-50 <sup>a</sup>	J-51	0.000	125	<	0.002
	J-52	1.000	125	0.998	<
J-50 <sup>b</sup>	J-51	0.000	125	<	0.002
	J-52	1.000	125	0.998	<
J-52	J-53	0.000	1,001	<	0.001
	J-54	1.000	1,001	0.999	<
J-54	J-55	0.000	1,001	<	0.001
	J-56	1.000	1,001	0.999	<
J-56	J-57	0.000	32,089	<	0.0002
	J-58	1.000	32,089	0.9998	<
J-59	J-60	0.969	32,089	0.967	0.971
	J-61	0.031	32,089	0.029	0.033
	J-62	0.000	32,089	<	0.0002
J-62	J-63	0.330	100	0.237	0.423
	J-64	0.670	100	0.577	0.763
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-85  
GROUP 14 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	23.954	41.850	454	20.080	27.828
J-10 <sup>b</sup>	11.079	15.549	394	9.534	12.624
J-12	9.438	12.158	162	7.550	11.326
J-14	1.756	4.371	499	1.372	2.140
J-16	4.288	3.560	500	3.976	4.600
J-18	0.000	0.000	43,213	0.000	0.000
J-21	0.003	0.054	43,213	0.002	0.004
J-23	7.769	3.945	43,213	7.732	7.806
J-24	3.274	3.743	84	2.456	4.092
J-26	8.060	6.496	84	6.641	9.479
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.811	1.960	125	0.462	1.160
J-50 <sup>b</sup>	0.811	1.960	125	0.462	1.160
J-52	4.423	6.926	499	3.815	5.031
J-54	5.893	4.926	497	5.460	6.327
J-56	0.000	0.000	32,089	0.000	0.000
J-59	1.997	0.251	32,089	1.994	2.000
J-60	0.000	0.000	32,089	0.000	0.000
J-62	5.111	3.992	63	4.097	6.125
J-64	4.136	5.288	66	2.824	5.448
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-3-4

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 15:  
FIFTH MARINE REGIMENT



TABLE D-86  
GROUP 15 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	504	0.999	<
	M-99	0.000	504	<	0.001
M-1 <sup>b</sup>	M-2	0.929	504	0.907	0.951
	M-99	0.071	504	0.049	0.093
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.926	156	0.885	0.967
	M-20	0.018	156	<	0.036
	M-30	0.000	156	<	0.001
	M-40	0.018	156	<	0.036
	M-50	0.006	156	<	0.016
	M-60	0.006	156	<	0.016
	M-70	0.000	156	<	0.001
	M-77	0.026	156	0.001	0.051
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.610	310	0.555	0.665
	M-20	0.035	310	0.014	0.056
	M-30	0.019	310	0.004	0.034
	M-40	0.000	310	<	0.001
	M-50	0.023	310	0.006	0.040
	M-60	0.000	310	<	0.001
	M-70	0.000	310	<	0.001
	M-77	0.242	310	0.194	0.290
	M-81	0.071	310	0.042	0.100

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-86 (CON'T)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-18	M-7	0.342	82	0.762	0.922
	M-20	0.012	82	<	0.032
	M-30	0.012	82	<	0.032
	M-40	0.000	82	<	0.002
	M-50	0.012	82	<	0.032
	M-60	0.000	82	<	0.002
	M-70	0.000	82	<	0.002
	M-77	0.122	82	0.050	0.194
	M-81	0.000	82	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	0.0002	0.0158
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.013	316	0.0004	0.0256
	M-32	0.006	316	<	0.013
	M-33	0.981	316	0.966	0.996
M-40	M-7	0.699	469	0.657	0.741
	M-20	0.043	469	0.025	0.061
	M-30	0.002	429	<	0.005
	M-50	0.026	469	0.012	0.040
	M-60	0.151	469	0.118	0.184
	M-77	0.062	469	0.040	0.084
	M-80	0.004	469	<	0.009
	M-81	0.000	469	<	0.001
	M-83	0.013	469	0.003	0.023
M-50	M-51	0.830	505	0.797	0.863
	M-52	0.008	505	0.0002	0.0158
	M-53	0.162	505	0.130	0.194
M-54	M-55	0.085	82	0.024	0.146
	M-57	0.915	82	0.854	0.976

TABLE D-87  
GROUP 15 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	17.661	31.056	504	14.947	20.375
M-1 <sup>b</sup>	10.376	12.636	468	9.224	11.528
M-2	2.476	1.257	100	2.226	2.726
M-3	0.284	0.550	300	0.221	0.347
M-4	1.619	1.217	70,709	1.610	1.628
M-6	0.242	0.217	300	0.217	0.267
M-7	0.772	0.482	400	0.724	0.820
M-8	1.371	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	1.948	3.279	328	1.591	2.305
M-18	1.128	2.102	85	0.672	1.584
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.217	70,709	1.610	1.628
M-24	0.249	0.834	261	0.147	0.351
M-30	4.435	5.742	310	3.792	5.079
M-33	0.407	0.578	300	0.341	0.473
M-34	1.619	1.217	70,709	1.610	1.628
M-35	0.249	0.834	261	0.147	0.351
M-40	14.685	17.318	463	13.098	16.272
M-50	9.927	13.107	82	7.029	12.825
M-53	0.968	1.201	300	0.831	1.105
M-54	1.619	1.217	70,709	1.610	1.628
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-88

## GROUP 15 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.722	122	0.642	0.802
	J-50	0.278	122	0.198	0.358
J-10 <sup>a</sup>	J-11	0.000	500	<	0.001
	J-12	1.000	500	0.999	<
J-10 <sup>b</sup>	J-11	0.124	500	0.095	0.153
	J-12	0.876	500	0.847	0.905
J-12	J-13	0.000	297	<	0.001
	J-14	1.000	297	0.999	<
J-14	J-15	0.000	1,000	<	0.001
	J-16	1.000	1,000	0.999	<
J-16	J-17	0.000	1,000	<	0.001
	J-18	1.000	1,000	0.999	<
J-18	J-19	1.000	43,213	0.9998	<
	J-20	0.000	43,213	<	0.0002
J-21	J-22	0.001	43,213	0.0007	0.0013
	J-23	0.964	43,213	0.962	0.966
	J-24	0.035	43,213	0.033	0.037
J-24	J-25	0.328	125	0.245	0.411
	J-26	0.672	125	0.589	0.755
J-29	J-30	0.000	43,213	<	0.0002
	J-34	1.000	43,213	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-88 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	98	<	0.002
	J-52	1.000	98	0.998	<
J-50 <sup>b</sup>	J-51	0.000	98	<	0.002
	J-52	1.000	98	0.998	<
J-52	J-53	0.000	1,001	<	0.001
	J-54	1.000	1,001	0.999	<
J-54	J-55	0.000	1,001	<	0.001
	J-56	1.000	1,001	0.999	<
J-56	J-57	0.000	32,089	<	0.0002
	J-58	1.000	32,089	0.9998	<
J-59	J-60	0.969	32,089	0.967	0.971
	J-61	0.031	32,089	0.029	0.033
	J-62	0.000	32,089	<	0.0002
J-62	J-63	0.330	100	0.237	0.423
	J-64	0.670	100	0.577	0.763
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-89  
GROUP 15 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	25.396	49.732	497	21.019	29.773
J-10 <sup>b</sup>	9.586	13.553	435	8.304	10.868
J-12	11.576	16.238	297	9.717	13.435
J-14	1.756	4.371	499	1.372	2.140
J-16	4.283	3.560	500	3.976	4.600
J-18	0.000	0.000	43,213	0.000	0.000
J-21	0.003	0.054	43,213	0.002	0.004
J-23	7.769	3.945	43,213	7.732	7.806
J-24	3.274	3.743	84	2.456	4.092
J-26	8.060	6.496	84	6.641	9.479
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.586	1.739	98	0.236	0.936
J-50 <sup>b</sup>	0.586	1.739	98		
J-52	4.423	6.926	499	3.236	5.936
J-54	5.893	4.926	497	5.460	6.327
J-56	0.000	0.000	32,089	0.000	0.000
J-59	1.997	0.251	32,089	1.994	2.000
J-60	0.000	0.000	32,089	0.000	0.000
J-62	5.111	3.992	63	4.097	6.125
J-64	4.136	5.288	66	2.824	5.448
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-3-5

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 16:  
SEVENTH MARINE REGIMENT

TABLE D-90  
GROUP 16 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	504	0.999	<
	M-99	0.000	504	<	0.001
M-1 <sup>b</sup>	M-2	0.919	504	0.895	0.943
	M-99	0.081	504	0.057	0.105
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.877	145	0.823	0.931
	M-20	0.061	147	0.022	0.100
	M-30	0.007	147	<	0.018
	M-40	0.034	147	0.004	0.064
	M-50	0.007	147	<	0.018
	M-60	0.000	147	<	0.001
	M-70	0.007	147	<	0.018
	M-77	0.007	147	<	0.018
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.484	275	0.424	0.544
	M-20	0.022	275	0.004	0.040
	M-30	0.015	275	0.001	0.029
	M-40	0.011	275	<	0.021
	M-50	0.025	275	0.006	0.044
	M-60	0.011	275	<	0.021
	M-70	0.000	275	<	0.001
	M-77	0.276	275	0.222	0.330
	M-81	0.156	275	0.112	0.200

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.



TABLE D-90 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.688	109	0.600	0.776
	M-20	0.101	109	0.044	0.158
	M-30	0.000	109	<	0.002
	M-40	0.009	109	<	0.024
	M-50	0.028	109	<	0.054
	M-60	0.037	109	0.001	0.073
	M-70	0.018	109	<	0.039
	M-77	0.119	109	0.058	0.180
	M-81	0.000	109	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	0.0002	0.0158
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.011	280	<	0.021
	M-32	0.007	280	<	0.015
	M-33	0.982	280	0.966	0.998
M-40	M-7	0.780	392	0.739	0.821
	M-20	0.018	392	0.005	0.031
	M-30	0.005	392	<	0.011
	M-50	0.026	392	0.010	0.042
	M-60	0.074	392	0.048	0.100
	M-77	0.056	392	0.033	0.079
	M-80	0.013	392	0.002	0.024
	M-81	0.005	392	<	0.011
	M-83	0.023	392	0.008	0.038
M-50	M-51	0.762	504	0.725	0.799
	M-52	0.022	504	0.009	0.035
	M-53	0.216	504	0.180	0.252
M-54	M-55	0.064	109	0.018	0.110
	M-57	0.936	109	0.890	0.982

TABLE D-91  
GROUP 16 NMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	20.809	34.700	502	17.770	23,848
M-1 <sup>b</sup>	12.705	13.973	461	11.422	13.988
M-2	1.934	1.253	113	1.700	2.168
M-3	0.284	0.550	300	0.221	0.347
M-4	1.619	1.217	70,709	1.610	1.628
M-6	0.242	0.217	300	0.217	0.267
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	2.441	4.487	281	1.913	2.969
M-18	2.979	10.121	105	1.014	4.944
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.217	70,709	1.610	1.628
M-24	0.249	0.834	261	0.147	0.351
M-30	4.647	6.054	275	3.927	5.368
M-33	0.407	0.578	300	0.341	0.473
M-34	1.619	1.217	70,709	1.610	1.628
M-35	0.249	0.834	261	0.147	0.351
M-40	10.350	11.140	386	9.232	11.468
M-50	7.725	12.235	109	5.394	10.056
M-53	0.968	1.201	300	0.831	1.105
M-54	1.619	1.217	70,709	1.610	1.628
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-92

## GROUP 16 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.581	151	0.502	0.660
	J-50	0.419	151	0.340	0.498
J-10 <sup>a</sup>	J-11	0.000	424	<	0.001
	J-12	1.000	424	0.999	<
J-10 <sup>b</sup>	J-11	0.097	424	0.069	0.125
	J-12	0.903	424	0.875	0.931
J-12	J-13	0.000	112	<	0.002
	J-14	1.000	112	0.998	<
J-14	J-15	0.000	1,000	<	0.001
	J-16	1.000	1,000	0.999	<
J-16	J-17	0.000	1,000	<	0.001
	J-18	1.000	1,000	0.999	<
J-18	J-19	1.000	43,213	0.9998	<
	J-20	0.000	43,213	<	0.0002
J-21	J-22	0.001	43,213	0.0007	0.0013
	J-23	0.964	43,213	0.962	0.966
	J-24	0.035	43,213	0.033	0.037
J-24	J-25	0.328	125	0.245	0.411
	J-26	0.672	125	0.589	0.755
J-29	J-30	0.000	43,213	<	0.0002
	J-34	1.000	43,213	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-92 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.009	112	<	0.024
	J-52	0.991	112	0.976	<
J-50 <sup>b</sup>	J-51	0.018	112	<	0.039
	J-52	0.982	112	0.961	<
J-52	J-53	0.000	1,001	<	0.001
	J-54	1.000	1,001	0.999	<
J-54	J-55	0.000	1,001	<	0.001
	J-56	1.000	1,001	0.999	<
J-56	J-57	0.000	32,089	<	0.0002
	J-58	1.000	32,089	0.9998	<
J-59	J-60	0.969	32,089	0.967	0.971
	J-61	0.031	32,089	0.029	0.033
	J-62	0.000	32,089	<	0.0002
J-62	J-63	0.330	100	0.237	0.423
	J-64	0.670	100	0.577	0.763
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-93  
GROUP 16 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	20.367	39.685	417	16.534	24.200
J-10 <sup>b</sup>	9.585	12.751	376	8.288	10.882
J-12	11.691	19.121	110	8.065	15.317
J-14	1.756	4.371	499	1.372	2.140
J-16	4.288	5.560	500	3.976	4.600
J-18	0.000	0.000	43,213	0.000	0.000
J-21	0.003	0.054	43,213	0.002	0.004
J-23	7.769	3.945	43,213	7.732	7.806
J-24	3.274	3.743	84	2.456	4.092
J-26	8.060	6.496	84	6.641	9.479
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.780	2.285	112	0.351	1.209
J-50 <sup>b</sup>	0.433	1.992	111	0.057	0.809
J-52	4.423	6.926	499	3.815	5.031
J-54	5.893	4.926	497	5.460	6.327
J-56	0.000	0.000	32,089	0.000	0.000
J-59	1.997	0.251	32,089	1.994	2.000
J-60	0.000	0.000	32,089	0.000	0.000
J-62	5.111	3.992	63	4.097	6.125
J-64	4.136	5.288	66	2.824	5.448
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-3-6

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 17:  
ELEVENTH MARINE REGIMENT

TABLE D-94

## GROUP 17 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	504	0.999	<
	M-99	0.000	504	<	0.001
M-1 <sup>b</sup>	M-2	0.921	504	0.897	0.945
	M-99	0.079	504	0.055	0.103
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.950	137	0.913	0.987
	M-20	0.007	137	<	0.019
	M-30	0.007	137	<	0.019
	M-40	0.007	137	<	0.019
	M-50	0.007	137	<	0.019
	M-60	0.000	137	<	0.019
	M-70	0.007	137	<	0.019
	M-77	0.015	137	<	0.032
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.536	338	0.483	0.589
	M-20	0.027	338	0.010	0.044
	M-30	0.036	338	0.016	0.056
	M-40	0.006	338	<	0.013
	M-50	0.024	338	0.008	0.040
	M-60	0.000	338	<	0.001
	M-70	0.000	338	<	0.001
	M-77	0.308	338	0.259	0.358
	M-81	0.063	338	0.037	0.089

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-94 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.824	136	0.759	0.889
	M-20	0.081	136	0.035	0.127
	M-30	0.015	136	<	0.032
	M-40	0.007	136	<	0.019
	M-50	0.022	136	<	0.043
	M-60	0.000	136	<	0.002
	M-70	0.000	136	<	0.002
	M-77	0.051	136	0.014	0.088
	M-81	0.000	136	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	0.0002	0.0158
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.017	346	0.003	0.031
	M-32	0.006	346	<	0.013
	M-33	0.977	346	0.961	0.993
M-40	M-7	0.803	379	0.763	0.843
	M-20	0.032	379	0.014	0.050
	M-30	0.000	379	<	0.001
	M-50	0.040	379	0.020	0.060
	M-60	0.069	379	0.043	0.095
	M-77	0.037	379	0.018	0.056
	M-80	0.003	379	<	0.008
	M-81	0.000	379	<	0.001
M-50	M-83	0.016	379	0.003	0.029
	M-51	0.724	504	0.685	0.763
	M-52	0.006	504	<	0.011
M-54	M-53	0.270	504	0.231	0.309
	M-55	0.044	136	0.009	0.079
	M-57	0.956	136	0.921	0.991



TABLE D-95  
GROUP 17 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	20.819	42.439	504	17.110	24.528
M-1 <sup>b</sup>	10.739	13.480	464	9.505	11.973
M-2	2.499	0.469	120	2.414	2.584
M-3	0.284	0.550	300	0.221	0.347
M-4	1.619	1.217	70,709	1.610	1.628
M-6	0.242	0.217	300	0.217	0.267
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	1.718	3.742	355	1.326	2.110
M-18	1.929	2.624	141	1.490	2.368
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.217	70,709	1.610	1.628
M-24	0.249	0.834	261	0.147	0.351
M-30	5.038	6.231	338	4.369	5.707
M-33	0.407	0.578	300	0.341	0.473
M-34	1.619	1.217	70,709	1.610	1.628
M-35	0.249	0.834	261	0.147	0.351
M-40	12.828	15.236	378	11.282	14.374
M-50	6.176	6.286	136	5.105	7.247
M-53	0.968	1.201	300	0.831	1.105
M-54	1.619	1.217	70,709	1.610	1.628
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-96

## GROUP 17 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.650	149	0.573	0.727
	J-50	0.350	149	0.273	0.427
J-10 <sup>a</sup>	J-11	0.000	363	<	0.001
	J-12	1.000	363	0.999	<
J-10 <sup>b</sup>	J-11	0.074	363	0.047	0.101
	J-12	0.926	363	0.899	0.953
J-12	J-13	0.000	88	<	0.002
	J-14	1.000	88	0.998	<
J-14	J-15	0.000	1,000	<	0.001
	J-16	1.000	1,000	0.999	<
J-16	J-17	0.000	1,000	<	0.001
	J-18	1.000	1,000	0.999	<
J-18	J-19	1.000	43,213	0.9998	<
	J-20	0.000	43,213	<	0.0002
J-21	J-22	0.001	43,213	0.0007	0.0013
	J-23	0.964	43,213	0.962	0.966
	J-24	0.035	43,213	0.033	0.037
J-24	J-25	0.328	125	0.245	0.411
	J-26	0.672	125	0.589	0.755
J-29	J-30	0.000	43,213	<	0.0002
	J-34	1.000	43,213	0.9998	<
J-30	J-32	0.982	8,327	0.979	0.985
	J-34	1.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-96 (CONT'D)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-50 <sup>a</sup>	J-51	0.000	115	<	0.002
	J-52	1.000	115	0.998	<
J-50 <sup>b</sup>	J-51	0.000	115	<	0.002
	J-52	1.000	115	0.998	<
J-52	J-53	0.000	1,001	<	0.001
	J-54	1.000	1,001	0.999	<
J-54	J-55	0.000	1,001	<	0.001
	J-56	1.000	1,001	0.999	<
J-56	J-57	0.000	32,089	<	0.0002
	J-58	1.000	32,089	0.9998	<
J-59	J-60	0.969	32,089	0.967	0.971
	J-61	0.031	32,089	0.029	0.033
	J-62	0.000	32,089	<	0.0002
J-62	J-63	0.330	100	0.237	0.423
	J-64	0.670	100	0.577	0.763
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-97  
GROUP 17 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	16.233	32.268	361	12.883	19.583
J-10 <sup>b</sup>	8.692	14.280	334	7.150	10.234
J-12	16.920	36.420	88	9.150	24.690
J-14	1.756	4.371	499	1.372	2.140
J-16	4.288	3.560	500	3.976	4.600
J-18	0.000	0.000	43,213	0.000	0.000
J-21	0.003	0.054	43,213	0.002	0.004
J-23	7.769	3.945	43,213	7.732	7.806
J-24	3.274	3.743	84	2.456	4.092
J-26	8.060	6.496	84	6.641	9.479
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.982	3.181	115	0.392	1.572
J-50 <sup>b</sup>	0.982	3.181	115	0.392	1.572
J-52	4.423	6.926	499	3.815	5.031
J-54	5.893	4.926	497	5.460	6.327
J-56	0.000	0.000	32,089	0.000	0.000
J-59	1.997	0.251	32,089	1.994	2.000
J-60	0.000	0.000	32,089	0.000	0.000
J-62	5.111	3.992	63	4.097	6.125
J-64	4.136	5.288	66	2.824	5.448
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

ANNEX D-4

DETAILED RESULTS FOR DATA GROUPS 18 THROUGH 22

ANNEX D-4

DETAILED RESULTS FOR DATA GROUPS 18 THROUGH 22

This annex contains the detailed results of our analysis of information processing in JUMPS/MMS for the following data groups:

<u>Group</u>	<u>Unit</u>	<u>DSSN</u>	<u>SDPI</u>
18	MCAS, El Toro	6796	03
19	MAG-11	6796	03
20	MAG-13	6796	03
21	MWSG-37	6796	03
22	MACG-38	6796	03

TABLE D-98

MMS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group			
	18	19	20	21 22
Event not reported				
Unrestricted	0.000	0.002	0.000	0.000
Restricted	0.046	0.072	0.056	0.053 0.034
Primary distribution of reported events				
Accepted - passed to KC in UTR para. 1/7	0.969	0.950	0.908	0.936 0.965
Rejected to RU in UTR para. 2/6	0.000	0.006	0.007	0.000 0.007
Rejected to ACU	0.015	0.019	0.047	0.024 0.007
Deleted (UTR para. 4)	0.008	0.000	0.000	0.000 0.007
Advisory message (UTR para. 5)	0.000	0.006	0.007	0.008 0.007
Suspense file				
ACU/SDPI loss	0.008	0.013	0.034	0.024 0.007
	0.000	0.006	0.000	0.008 0.000
UTR para. 2/6 entry not resubmitted	0.000	0.022	0.000	0.011 0.006
UTR para. 5 entry not resubmitted	0.000	0.010	0.000	0.029 0.003
CDPA/MCFC edit - poster failures				
Edit failures	0.001	0.001	0.001	0.001 0.001
Poster failures	0.034	0.034	0.034	0.034 0.034

TABLE D-99  
MMS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

<u>Outcome</u>	<u>Group</u>			
	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u> <u>22</u>
Event not reported	0.000	0.002	0.000	0.000 0.000
UTR para. 2/6 entry - not corrected	0.000	0.000	0.000	0.000 0.000
UTR para. 5 entry - not corrected	0.000	0.000	0.000	0.000 0.000
Rejected to RU - no action required	0.006	0.011	0.017	0.013 0.013
UTR para. 4 entry	0.008	0.002	0.004	0.004 0.008
Scanner reject - not corrected	0.000	0.000	0.000	0.000 0.000
Edit reject - not corrected	0.001	0.001	0.002	0.001 0.000
Lost in edit	0.001	0.008	0.004	0.010 0.001
Rejected to ACU - no action required	0.007	0.010	0.022	0.012 0.004
Lost in suspense file	0.000	0.001	0.001	0.000 0.000
Posted to CMR	0.976	0.965	0.952	0.959 0.973



TABLE D-100  
AVERAGE MMS TIMES (DAYS) FOR SELECTED TRANSITIONS

<u>Transition</u>	<u>Group</u>			
	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u> <u>22</u>
From event to Unit Diary				
Unrestricted				
Restricted	14.00	19.37	15.73	16.40 12.91
From UD to ACU scanning	10.30	11.26	10.15	11.60 9.71
	2.90	2.65	2.81	2.88 2.75
From ACU scan to UTR	0.30	0.30	0.30	0.30 0.30
From UTR para. 2/6 to RU resubmission	5.93	9.98	4.95	8.08 4.00
From UTR para. 5 to RU resubmission	6.00	11.87	8.50	10.57 5.50
From suspense file to suspense file	11.91	12.46	14.49	13.37 16.81
From rejection to ACU to ACU resubmission	0.95	0.95	0.95	0.95 0.95
From rejection to ACU to AUTODIN entry	5.01	5.70	5.17	5.32 5.04
From ACU scan to CDPA edit	3.06	3.20	3.51	3.27 3.09
From AUTODIN entry to CDPA edit	2.64	2.64	2.64	2.64 2.64
From CDPA receipt to CMR posting	1.87	1.87	1.87	1.87 1.87
Event occurrence to CMR posting	21.72	27.00	23.82	24.32 20.52

TABLE D-101

CUMULATIVE PROBABILITY DISTRIBUTION OF MMS TIMES  
FOR TRANSITION FROM EVENT TO UNIT DIARY

Time (days)	Group				
	18	19	20	21	22
0	0.030	0.059	0.066	0.050	0.096
1	0.108	0.115	0.166	0.096	0.182
2	0.230	0.159	0.270	0.138	0.283
3	0.335	0.233	0.376	0.224	0.415
4	0.421	0.304	0.480	0.335	0.507
5	0.533	0.377	0.539	0.393	0.561
6	0.639	0.474	0.608	0.453	0.639
7	0.669	0.502	0.630	0.496	0.655
8	0.693	0.548	0.646	0.523	0.689
10	0.729	0.588	0.690	0.614	0.729
15	0.774	0.714	0.743	0.723	0.790
20	0.800	0.773	0.796	0.788	0.816
30	0.848	0.848	0.840	0.853	0.860
40	0.900	0.903	0.884	0.903	0.926
50	0.930	0.921	0.931	0.928	0.942
100	0.988	0.963	0.981	0.976	0.988
204	1.000	0.989	0.997	0.998	0.996
229	--	0.996	0.997	0.998	1.000
245	--	0.998	0.997	1.000	--
284	--	1.000	0.997	--	--
317	--	--	1.000	--	--

TABLE D-102

JUMPS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group			
	18	19	20	21
Primary separation				
ABA event	0.196	0.417	0.245	0.400
TODE event	0.804	0.583	0.755	0.600
ABA event not reported	0.014	0.000	0.000	0.010
ABA lost at DO	0.000	0.000	0.000	0.000
ABA decentrally processed	0.000	0.000	0.000	0.000
ABA read by scanner	0.000	0.000	0.000	0.000
ABA scanner rejects lost	0.000	0.000	0.000	0.000
TODE event not reported	0.000	0.000	0.000	0.000
TODE document lost at DO	0.000	0.000	0.000	0.000
TODE lost at DO	0.000	0.000	0.000	0.000
TODE decentrally processed	0.000	0.000	0.000	0.000
TODE read by scanner	0.000	0.000	0.000	0.000
TODE scanner rejects lost	0.000	0.000	0.000	0.000
MCFC scanner reject of ABA	0.078	0.078	0.078	0.078
MCFC posting failure for ABA	0.041	0.041	0.041	0.041
MCFC scanner reject of TODE	0.018	0.018	0.018	0.018
MCFC posting failure for TODE	0.034	0.034	0.034	0.034

TABLE D-103

JUMPS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

<u>Outcome</u>	<u>Group</u>			
	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u> <u>22</u>
ABA event not reported	0.014	0.000	0.000	0.010 0.008
ABA lost at DO	0.000	0.000	0.000	0.000 0.000
ABA rejected at MCFC - not resubmitted	0.000	0.000	0.000	0.000 0.000
TODE event not reported	0.000	0.000	0.000	0.000 0.000
TODE document lost at RU	0.000	0.000	0.000	0.000 0.000
TODE document lost at DO	0.000	0.000	0.000	0.000 0.000
TODE lost at DO	0.000	0.000	0.000	0.000 0.000
TODE rejected at ACU - lost	0.000	0.000	0.000	0.000 0.000
TODE rejected at MCFC - lost	0.000	0.000	0.000	0.000 0.000
ABA posted to MMPA	0.986	1.000	1.000	0.990 0.992
TODE posted to MMPA	1.000	1.000	1.000	1.000 1.000

TABLE D-104  
AVERAGE JUMPS TIMES (DAYS) FOR SELECTED ABA TRANSITIONS

<u>Transition</u>	<u>Group</u>			
	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u> <u>22</u>
From ABA event to ABA				
Unrestricted	0.32	0.60	0.89	1.05 0.70
Restricted	0.32	0.55	0.89	1.05 0.46
From ABA preparation to receipt at DO	2.57	2.57	2.57	2.57 2.57
From ABA receipt at DO to DTL	4.89	4.89	4.89	4.89 4.89
From DTL preparation to decentral scan	0.00	0.00	0.00	0.00 0.00
From decentral scan to mailing	0.00	0.00	0.00	0.00 0.00
From DTL preparation to mailing	0.00	0.00	0.00	0.00 0.00
From ABA receipt at MCFC to central scan	0.64	0.64	0.64	0.64 0.64
From central scan to posting to MNPA	0.00	0.00	0.00	0.00 0.00
From receipt at MCFC to posting	1.21	1.21	1.21	1.21 1.21
From ABA event to posting to MNPA	11.89	12.18	12.46	12.63 12.28

TABLE D-105  
AVERAGE JUMPS TIMES (DAYS) FOR SELECTED TODE TRANSITIONS

Transition	Group			
	18	19	20	21
From TODE event to TODE document				
Unrestricted	12.69	8.06	7.31	10.86
Restricted	7.77	4.57	5.11	5.42
From TODE document preparation to receipt at DO	9.05	4.23	7.42	11.08
From document receipt at DO to TODE	0.61	0.61	0.61	0.61
From TODE to DTL preparation	3.57	3.57	3.57	3.57
From DTL preparation to decentral scan	0.00	0.00	0.00	0.00
From decentral scan to mailing	0.00	0.00	0.00	0.00
From DTL preparation to mailing	0.00	0.00	0.00	0.00
From TODE receipt at MCFC to central scan	1.06	1.06	1.06	1.06
From central scan to posting to MMPA	0.01	0.01	0.01	0.01
From receipt at MCFC to posting to MMPA	2.09	2.09	2.09	2.09
From TODE event to posting to MMPA	32.18	22.73	25.17	32.38
				27.42

TABLE D-106

CUMULATIVE PROBABILITY DISTRIBUTION OF JUMPS TIMES  
FOR TRANSITION FROM TODE EVENT TO TODE DOCUMENT

Time (days)	Group				
	18	19	20	21	22
0	0.349	0.488	0.516	0.492	0.601
1	0.410	0.570	0.547	0.570	0.636
2	0.466	0.599	0.609	0.639	0.652
3	0.514	0.662	0.641	0.672	0.672
4	0.562	0.710	0.688	0.692	0.692
5	0.598	0.734	0.719	0.718	0.707
6	0.622	0.758	0.734	0.741	0.742
7	0.639	0.778	0.742	0.748	0.773
8	0.663	0.787	0.773	0.761	0.783
10	0.727	0.850	0.813	0.784	0.813
15	0.803	0.879	0.859	0.816	0.843
20	0.831	0.899	0.891	0.852	0.864
30	0.867	0.937	0.938	0.902	0.924
40	0.904	0.947	0.961	0.931	0.944
50	0.920	0.952	0.969	0.941	0.949
75	0.964	0.971	0.984	0.970	0.970
95	0.980	0.986	1.000	0.977	0.970
137	0.992	1.000	--	0.993	0.985
141	1.000	--	--	0.997	0.985
286	--	--	--	0.997	1.000
365	--	--	--	1.000	--

TAB D-4-1

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 18:  
MARINE CORPS AIR STATION, EL TORO, CALIFORNIA



TABLE D-107  
GROUP 18 MMS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample Size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-1 <sup>a</sup>	M-2	1.000	500	0.099	<
	M-99	0.000	500	<	0.001
M-1 <sup>b</sup>	M-2	0.954	500	0.936	0.972
	M-99	0.046	500	0.028	0.064
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.938	130	0.896	0.980
	M-20	0.015	130	<	0.033
	M-30	0.000	130	<	0.002
	M-40	0.008	130	<	0.021
	M-50	0.000	130	<	0.002
	M-60	0.008	130	<	0.021
	M-70	0.000	130	<	0.002
	M-77	0.031	130	0.001	0.061
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.603	73	0.489	0.717
	M-20	0.027	73	<	0.059
	M-30	0.000	73	<	0.002
	M-40	0.000	73	<	0.002
	M-50	0.000	73	<	0.002
	M-60	0.014	73	<	0.037
	M-70	0.000	73	<	0.002
	M-77	0.356	73	0.245	0.468
	M-81	0.000	73	<	0.002

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-107 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.750	80	0.654	0.846
	M-20	0.000	80	<	0.002
	M-30	0.000	80	<	0.002
	M-40	0.125	80	0.051	0.199
	M-50	0.125	80	0.051	0.199
	M-60	0.000	80	<	0.002
	M-70	0.000	80	<	0.002
	M-77	0.000	80	<	0.002
	M-81	0.000	80	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	<	0.015
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.000	73	<	0.002
	M-32	0.000	73	<	0.002
	M-33	1.000	73	0.998	<
M-40	M-7	0.938	192	0.904	0.972
	M-20	0.010	192	<	0.022
	M-30	0.000	192	<	0.001
	M-50	0.005	192	<	0.013
	M-60	0.031	192	0.006	0.056
	M-77	0.000	192	<	0.001
	M-80	0.000	192	<	0.001
	M-81	0.000	192	<	0.001
	M-83	0.016	192	<	0.031
M-50	M-51	0.984	500	0.973	0.995
	M-52	0.000	500	<	0.001
	M-53	0.016	500	0.005	0.027
M-54	M-55	0.000	8	<	0.007
	M-57	1.000	8	0.993	<

TABLE D-108  
GROUP 18 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	14.002	22.847	499	11.995	16.009
M-1 <sup>b</sup>	10.304	13.446	477	9.096	11.512
M-2	1.988	0.247	111	1.941	2.035
M-3	0.912	1.313	197	0.727	1.097
M-4	1.619	1.712	70,709	1.606	1.632
M-6	0.295	0.402	200	0.239	0.351
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	0.971	2.832	92	0.380	1.562
M-18	1.973	2.297	143	1.591	2.355
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.712	70,709	1.606	1.632
M-24	0.249	0.834	261	0.147	0.351
M-30	5.932	25.577	73	<	10.966
M-33	0.686	0.713	200	0.586	0.786
M-34	1.619	1.712	70,709	1.606	1.632
M-35	0.249	0.834	261	0.147	0.351
M-40	11.911	11.562	191	10.259	13.563
M-50	6.000	4.036	8	2.996	9.004
M-53	0.877	0.575	200	0.797	0.957
M-54	1.619	1.712	70,709	1.606	1.632
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-109

## GROUP 18 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.804	240	0.753	0.854
	J-50	0.196	240	0.146	0.247
J-10 <sup>a</sup>	J-11	0.000	250	<	0.001
	J-12	1.000	250	0.999	<
J-10 <sup>b</sup>	J-11	0.060	250	0.030	0.090
	J-12	0.940	250	0.910	0.970
J-12	J-13	0.000	139	<	0.002
	J-14	1.000	139	0.998	<
J-14	J-15	0.000	500	<	0.001
	J-16	1.000	500	0.999	<
J-16	J-17	0.000	500	<	0.001
	J-18	1.000	500	0.999	<
J-18	J-19	0.000	29,616	<	0.0002
	J-20	1.000	29,616	0.9998	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	29,616	0.9998	<
	J-34	0.000	29,616	<	0.0002
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-109 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.014	144	<	0.030
	J-52	0.986	144	0.970	<
J-50 <sup>b</sup>	J-51	0.014	144	<	0.030
	J-52	0.986	144	0.970	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	1.000	24,077	0.9998	<
	J-58	0.000	24,077	<	0.0002
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-110  
GROUP 18 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	12.691	24.180	249	9.666	15.716
J-10 <sup>b</sup>	7.765	12.442	234	6.159	9.371
J-12	9.050	13.082	139	6.845	11.255
J-14	0.607	3.948	499	0.260	0.954
J-16	3.570	4.033	500	3.216	3.924
J-18	0.000	0.000	29,616	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.319	2.091	144	<	0.609
J-50 <sup>b</sup>	0.319	2.091	144	<	0.609
J-52	2.565	3.661	499	2.244	2.887
J-54	4.894	4.478	500	4.501	5.287
J-56	0.000	0.000	24,077	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TAB D-4-2

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 19:  
MARINE AIR GROUP ELEVEN

TABLE D-111

## GROUP 19 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	0.998	456	0.995	<
	M-99	0.002	456	<	0.005
M-1 <sup>b</sup>	M-2	0.928	456	0.904	0.952
	M-99	0.072	456	0.048	0.096
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.937	155	0.899	0.975
	M-20	0.019	155	<	0.037
	M-30	0.006	155	<	0.016
	M-40	0.013	155	<	0.028
	M-50	0.006	155	<	0.016
	M-60	0.000	155	<	0.001
	M-70	0.006	155	<	0.016
	M-77	0.013	155	<	0.028
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.412	126	0.325	0.499
	M-20	0.032	126	0.001	0.063
	M-30	0.024	126	<	0.047
	M-40	0.000	126	<	0.002
	M-50	0.024	126	<	0.047
	M-60	0.008	126	<	0.021
	M-70	0.024	126	<	0.047
	M-77	0.428	126	0.341	0.515
	M-81	0.048	126	0.010	0.086

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing times restricted to 60 days or less.



TABLE D-111 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.440	75	0.326	0.554
	M-20	0.120	75	0.045	0.195
	M-30	0.013	75	<	0.035
	M-40	0.000	75	<	0.002
	M-50	0.227	75	0.131	0.323
	M-60	0.000	75	<	0.002
	M-70	0.000	75	<	0.002
	M-77	0.200	75	0.108	0.292
	M-81	0.000	75	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	<	0.015
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.058	137	0.018	0.098
	M-32	0.022	137	<	0.043
	M-33	0.920	137	0.874	0.966
M-40	M-7	0.635	137	0.554	0.716
	M-20	0.023	137	<	0.044
	M-30	0.007	137	<	0.019
	M-50	0.052	137	0.014	0.090
	M-60	0.112	137	0.059	0.165
	M-77	0.097	137	0.047	0.147
	M-80	0.059	137	0.019	0.099
	M-81	0.000	137	<	0.002
	M-83	0.015	137	<	0.032
M-50	M-51	0.795	385	0.745	0.836
	M-52	0.010	385	0.000	0.020
	M-53	0.195	385	0.155	0.235
M-54	M-55	0.067	75	0.010	0.125
	M-57	0.933	75	0.875	0.990

TABLE D-112  
GROUP 19 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	19.370	35.421	454	16.091	22.649
M-1 <sup>b</sup>	11.255	11.612	423	10.141	12.369
M-2	1.736	0.384	67	1.642	1.831
M-3	0.912	1.313	197	0.727	1.097
M-4	1.619	1.712	70,709	1.606	1.632
M-6	0.295	0.402	200	0.239	0.351
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	2.897	3.975	142	2.234	3.560
M-18	7.035	11.749	74	4.299	9.772
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.712	70,709	1.606	1.632
M-24	0.249	0.834	261	0.147	0.351
M-30	9.984	8.630	123	8.437	11.531
M-33	0.686	0.713	200	0.586	0.786
M-34	1.619	1.712	70,709	1.606	1.632
M-35	0.249	0.834	261	0.147	0.351
M-40	12.461	10.785	128	10.566	14.356
M-50	11.867	10.247	75	9.497	14.237
M-53	0.877	0.575	200	0.797	0.957
M-54	1.619	1.712	70,709	1.606	1.632
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-113

## GROUP 19 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.583	144	0.502	0.664
	J-50	0.417	144	0.336	0.498
J-10 <sup>a</sup>	J-11	0.000	208	<	0.001
	J-12	1.000	208	0.999	<
J-10 <sup>b</sup>	J-11	0.038	208	0.012	0.064
	J-12	0.962	208	0.936	0.988
J-12	J-13	0.000	117	<	0.002
	J-14	1.000	117	0.998	<
J-14	J-15	0.000	500	<	0.001
	J-16	1.000	500	0.999	<
J-16	J-17	0.000	500	<	0.001
	J-18	1.000	500	0.999	<
J-18	J-19	0.000	29,616	<	0.0002
	J-20	1.000	29,616	0.9998	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	29,616	0.9998	<
	J-34	0.000	29,616	<	0.0002
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-113 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.000	120	<	0.002
	J-52	1.000	120	0.998	<
J-50 <sup>b</sup>	J-51	0.008	120	<	0.022
	J-52	0.992	120	0.978	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	1.000	24,077	0.9998	<
	J-58	0.000	24,077	<	0.0002
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-114  
GROUP 19 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	8.063	20.234	207	5.286	10.840
J-10 <sup>b</sup>	4.573	9.014	199	3.311	5.835
J-12	4.231	5.318	117	3.253	5.209
J-14	0.607	3.948	499	0.260	0.954
J-16	3.570	4.033	500	3.216	3.924
J-18	0.000	0.000	29,616	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.602	1.914	120	0.255	0.949
J-50 <sup>b</sup>	0.548	1.787	119	0.222	0.874
J-52	2.565	3.661	499	2.244	2.887
J-54	4.894	4.478	500	4.501	5.287
J-56	0.000	0.000	24,077	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TAB D-4-3

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 20:  
MARINE AIR GROUP THIRTEEN

TABLE D-115

## GROUP 20 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	319	0.999	<
	M-99	0.000	319	<	0.001
M-1 <sup>b</sup>	M-2	0.944	319	0.919	0.969
	M-99	0.056	319	0.031	0.081
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.885	149	0.833	0.937
	M-20	0.047	149	0.013	0.081
	M-30	0.007	149	<	0.018
	M-40	0.034	149	0.005	0.063
	M-50	0.007	149	<	0.018
	M-60	0.000	149	<	0.001
	M-70	0.000	149	<	0.001
	M-77	0.020	149	<	0.039
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.382	102	0.287	0.477
	M-20	0.049	102	0.007	0.091
	M-30	0.049	102	0.007	0.091
	M-40	0.010	102	<	0.026
	M-50	0.010	102	<	0.026
	M-60	0.000	102	<	0.002
	M-70	0.000	102	<	0.002
	M-77	0.451	102	0.353	0.549
	M-81	0.049	102	0.007	0.091

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing times restricted to 60 days or less.

TABLE D-115 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.656	29	0.475	0.837
	M-20	0.138	29	0.007	0.269
	M-30	0.000	29	<	0.003
	M-40	0.034	29	<	0.091
	M-50	0.000	29	<	0.003
	M-60	0.000	29	<	0.003
	M-70	0.000	29	<	0.003
	M-77	0.172	29	0.028	0.316
	M-81	0.000	29	<	0.003
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	<	0.015
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.010	103	<	0.026
	M-32	0.000	103	<	0.002
	M-33	0.990	103	0.974	<
M-40	M-7	0.680	249	0.622	0.738
	M-20	0.004	249	<	0.011
	M-30	0.000	249	<	0.001
	M-50	0.068	249	0.037	0.099
	M-60	0.108	249	0.069	0.147
	M-77	0.104	249	0.066	0.142
	M-80	0.036	249	0.013	0.059
	M-81	0.000	249	<	0.001
	M-83	0.000	249	<	0.001
M-50	M-51	0.928	404	0.903	0.953
	M-52	0.000	404	<	0.001
	M-53	0.072	404	0.047	0.097
M-54	M-55	0.034	29	<	0.091
	M-57	0.966	29	0.909	<



TABLE D-116  
GROUP 20 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	15.730	29.790	319	12.439	19.021
M-1 <sup>b</sup>	10.146	12.996	301	8.668	11.624
M-2	1.901	0.661	94	1.765	2.037
M-3	0.912	1.313	197	0.727	1.097
M-4	1.619	1.712	70,709	1.606	1.632
M-6	0.295	0.402	200	0.239	0.351
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	2.044	4.460	111	1.202	2.886
M-18	1.365	3.593	102	0.657	2.073
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.712	70,709	1.606	1.632
M-24	0.249	0.834	261	0.147	0.351
M-30	4.951	4.237	102	4.116	5.786
M-33	0.686	0.713	200	0.586	0.786
M-34	1.619	1.712	70,709	1.606	1.632
M-35	0.249	0.834	261	0.147	0.351
M-40	14.492	17.049	240	12.319	16.665
M-50	8.500	6.386	28	5.981	11.019
M-53	0.877	0.575	200	0.797	0.957
M-54	1.619	1.712	70,709	1.606	1.632
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

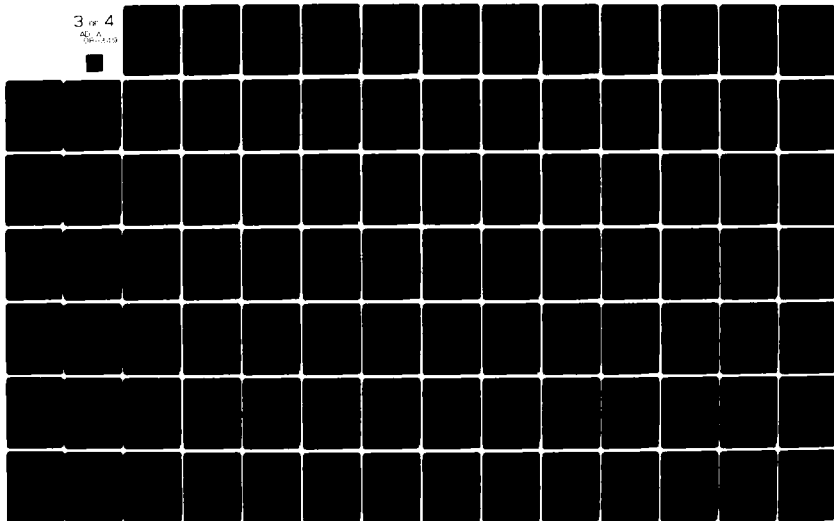
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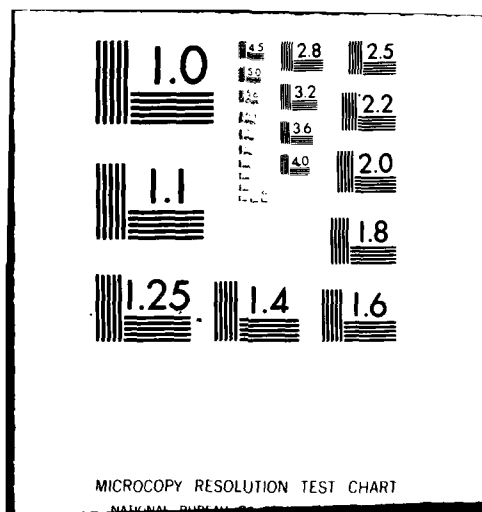


TABLE D-117  
GROUP 20 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.755	143	0.684	0.826
	J-50	0.245	143	0.174	0.316
J-10 <sup>a</sup>	J-11	0.000	128	<	0.002
	J-12	1.000	128	0.998	<
J-10 <sup>b</sup>	J-11	0.031	128	0.001	0.061
	J-12	0.969	128	0.939	0.999
J-12	J-13	0.000	53	<	0.002
	J-14	1.000	53	0.998	<
J-14	J-15	0.000	500	<	0.001
	J-16	1.000	500	0.999	<
J-16	J-17	0.000	500	<	0.001
	J-18	1.000	500	0.999	<
J-18	J-19	0.000	29,616	<	0.0002
	J-20	1.000	29,616	0.9998	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	29,616	0.9998	<
	J-34	0.000	29,616	<	0.0002
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-117 (CON'T)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-50 <sup>a</sup>	J-51	0.000	96	<	0.002
	J-52	1.000	96	0.998	<
J-50 <sup>b</sup>	J-51	0.000	96	<	0.002
	J-52	1.000	96	0.998	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	1.000	24,077	0.9998	<
	J-58	0.000	24,077	<	0.0002
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,965	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-118  
GROUP 20 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	7.313	15.401	128	4.607	10.019
J-10 <sup>b</sup>	5.113	9.138	124	3.482	6.744
J-12	7.415	8.326	53	5.094	9.736
J-14	0.607	3.948	499	0.260	0.954
J-16	3.570	4.033	500	3.216	3.924
J-18	0.000	0.000	29,616	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.885	1.508	96	0.577	1.193
J-50 <sup>b</sup>	0.885	1.508	96	0.577	1.193
J-52	2.565	3.661	499	2.244	2.887
J-54	4.894	4.478	500	4.501	5.287
J-56	0.000	0.000	24,077	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TAB D-4-4

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 21:  
MARINE WING SUPPORT GROUP THIRTY-SEVEN

TABLE D-119

## GROUP 21 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	585	0.999	<
	M-99	0.000	585	<	0.001
M-1 <sup>b</sup>	M-2	0.947	585	0.929	0.965
	M-99	0.053	585	0.035	0.071
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.928	125	0.882	0.974
	M-20	0.024	125	<	0.047
	M-30	0.000	125	<	0.002
	M-40	0.024	125	<	0.047
	M-50	0.008	125	<	0.021
	M-60	0.000	125	<	0.002
	M-70	0.008	125	<	0.021
	M-77	0.008	125	<	0.021
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.440	177	0.367	0.514
	M-20	0.017	177	<	0.033
	M-30	0.017	177	<	0.033
	M-40	0.006	177	<	0.016
	M-50	0.023	177	0.001	0.045
	M-60	0.006	177	<	0.016
	M-70	0.000	177	<	0.001
	M-77	0.362	177	0.291	0.433
	M-81	0.130	177	0.080	0.180

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.



TABLE D-119 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
M-18	M-7	0.616	73	0.503	0.729
	M-20	0.055	73	0.002	0.108
	M-30	0.000	73	<	0.002
	M-40	0.014	73	<	0.037
	M-50	0.041	73	<	0.080
	M-60	0.000	73	<	0.002
	M-70	0.178	73	0.089	0.267
	M-77	0.096	73	0.027	0.165
	M-81	0.000	73	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	<	0.015
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.006	180	<	0.016
	M-32	0.011	180	<	0.024
	M-33	0.983	180	0.967	<
M-40	M-7	0.711	540	0.673	0.749
	M-20	0.015	540	0.005	0.025
	M-30	0.000	540	<	0.001
	M-50	0.020	540	0.008	0.032
	M-60	0.150	540	0.120	0.180
	M-77	0.087	540	0.063	0.111
	M-80	0.002	540	<	0.005
	M-81	0.000	540	<	0.001
	M-83	0.015	540	0.005	0.025
M-50	M-51	0.846	585	0.817	0.875
	M-52	0.029	585	0.015	0.043
	M-53	0.125	585	0.098	0.152
M-54	M-55	0.055	73	0.002	0.108
	M-57	0.945	73	0.892	0.998

TABLE D-120  
GROUP 21 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	16.395	25.191	585	14.352	18.438
M-1 <sup>b</sup>	11.599	12.300	554	10.574	12.624
M-2	1.971	0.965	100	1.779	2.163
M-3	0.912	1.313	197	0.727	1.097
M-4	1.619	1.712	70,709	1.606	1.632
M-6	0.295	0.402	200	0.239	0.351
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	1.972	3.345	243	1.548	2.396
M-18	2.666	5.236	61	1.314	4.018
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.712	70,709	1.606	1.632
M-24	0.249	0.834	261	0.147	0.351
M-30	8.079	7.480	177	6.968	9.190
M-33	0.686	0.713	200	0.586	0.786
M-34	1.619	1.712	70,709	1.606	1.632
M-35	0.249	0.834	261	0.147	0.351
M-40	13.372	15.555	537	12.055	14.689
M-50	10.571	11.594	63	7.626	13.516
M-53	0.877	0.575	200	0.797	0.957
M-54	1.619	1.712	70,709	1.606	1.632
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-121  
GROUP 21 JUMPS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
J-1	J-10	0.600	120	0.512	0.689
	J-50	0.400	120	0.311	0.488
J-10 <sup>a</sup>	J-11	0.000	305	<	0.001
	J-12	1.000	305	0.999	<
J-10 <sup>b</sup>	J-11	0.052	305	0.027	0.077
	J-12	0.948	305	0.923	0.973
J-12	J-13	0.000	146	<	0.001
	J-14	1.000	146	0.999	<
J-14	J-15	0.000	500	<	0.001
	J-16	1.000	500	0.999	<
J-16	J-17	0.000	500	<	0.001
	J-18	1.000	500	0.999	<
J-18	J-19	0.000	29,616	<	0.0002
	J-20	1.000	29,616	0.9998	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	29,616	0.9998	<
	J-34	0.000	29,616	<	0.0002
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-121 (CON'T)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.010	104	<	0.026
	J-52	0.990	104	0.974	<
J-50 <sup>b</sup>	J-51	0.010	104	<	0.026
	J-52	0.990	104	0.974	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	1.000	24,077	0.9998	<
	J-58	0.000	24,077	<	0.0002
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-122

## GROUP 21 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	10.862	30.135	305	7.457	14.267
J-10 <sup>b</sup>	5.419	10.330	289	4.220	6.618
J-12	11.082	16.736	146	8.330	13.834
J-14	0.607	3.948	499	0.260	0.954
J-16	3.570	4.033	500	3.216	3.924
J-18	0.000	0.000	29,616	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	1.052	2.249	104	0.613	1.491
J-50 <sup>b</sup>	1.052	2.249	104	0.613	1.491
J-52	2.565	3.661	499	2.244	2.887
J-54	4.894	4.478	500	4.501	5.287
J-56	0.000	0.000	24,077	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TAB D-4-5

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUP 22:  
MARINE AIR CONTROL GROUP THIRTY-EIGHT

TABLE D-123

## GROUP 22 MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-1 <sup>a</sup>	M-2	1.000	499	0.999	<
	M-99	0.000	499	<	0.001
M-1 <sup>b</sup>	M-2	0.966	499	0.950	0.982
	M-99	0.034	499	0.018	0.050
M-4	M-5	0.997	70,709	0.9966	0.9974
	M-12	0.003	70,709	0.0026	0.0034
M-6	M-7	0.951	143	0.915	0.987
	M-20	0.007	143	<	0.019
	M-30	0.007	143	<	0.019
	M-40	0.007	143	<	0.019
	M-50	0.007	143	<	0.019
	M-60	0.007	143	<	0.019
	M-70	0.000	143	<	0.001
	M-77	0.014	143	<	0.030
M-9	M-10	0.999	582,635	0.9989	<
	M-91	0.001	582,635	<	0.0011
M-10	M-11	0.966	989,486	0.9657	0.9663
	M-91	0.034	989,486	0.0336	0.0344
M-16	M-7	0.503	266	0.443	0.563
	M-20	0.071	266	0.040	0.102
	M-30	0.004	266	<	0.010
	M-40	0.015	266	0.0003	0.0297
	M-50	0.147	266	0.104	0.190
	M-60	0.008	266	<	0.017
	M-70	0.143	266	0.101	0.185
	M-77	0.102	266	0.065	0.139
	M-81	0.008	266	<	0.017
M-17	M-7	0.465	155	0.386	0.544
	M-20	0.052	155	0.017	0.087
	M-30	0.026	155	0.001	0.051
	M-40	0.006	155	<	0.016
	M-50	0.013	155	<	0.028
	M-60	0.000	155	<	0.001
	M-70	0.000	155	<	0.001
	M-77	0.316	155	0.242	0.390
	M-81	0.123	155	0.071	0.175

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-123 (CONT'D)

Transition		Conditional probability	Sample size	Confidence limits	
From	To			Lower	Upper
M-18	M-7	0.960	50	0.913	<
	M-20	0.000	50	<	0.002
	M-30	0.000	50	<	0.002
	M-40	0.000	50	<	0.002
	M-50	0.020	50	<	0.053
	M-60	0.000	50	<	0.002
	M-70	0.000	50	<	0.002
	M-77	0.020	50	<	0.053
	M-81	0.000	50	<	0.002
M-19	M-7	0.000	504	<	0.001
	M-20	0.032	504	0.017	0.047
	M-30	0.008	504	<	0.015
	M-40	0.000	504	<	0.001
	M-50	0.147	504	0.116	0.178
	M-60	0.000	504	<	0.001
	M-77	0.813	504	0.779	0.847
M-20	M-21	0.438	500	0.395	0.482
	M-22	0.030	500	0.015	0.045
	M-23	0.532	500	0.488	0.576
M-23	M-24	0.004	10,523	0.003	0.005
	M-25	0.996	10,523	0.995	0.997
M-30	M-31	0.000	156	<	0.001
	M-32	0.006	156	<	0.016
	M-33	0.994	156	0.984	<
M-40	M-7	0.717	212	0.656	0.778
	M-20	0.033	212	0.009	0.057
	M-30	0.000	212	<	0.001
	M-50	0.009	212	<	0.020
	M-60	0.094	212	0.055	0.134
	M-77	0.085	212	0.047	0.123
	M-80	0.005	212	<	0.013
	M-81	0.000	212	<	0.001
	M-83	0.057	212	0.026	0.088
M-50	M-51	0.983	354	0.970	0.997
	M-52	0.003	354	<	0.008
	M-53	0.014	354	0.002	0.026
M-54	M-55	0.000	5	<	0.010
	M-57	1.000	5	0.990	<



TABLE D-124  
GROUP 22 MMS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
M-1 <sup>a</sup>	12.906	23.181	499	10.870	14.942
M-1 <sup>b</sup>	9.707	12.915	482	8.553	10.861
M-2	1.842	0.640	100	1.715	1.969
M-3	0.912	1.313	197	0.727	1.097
M-4	1.619	1.712	70,709	1.606	1.632
M-6	0.295	0.402	200	0.239	0.351
M-7	0.772	0.482	400	0.724	0.820
M-8	1.871	2.175	372	1.649	2.094
M-12	0.249	0.834	261	0.147	0.351
M-16	1.793	2.881	227	1.416	2.171
M-17	0.725	2.917	235	0.349	1.101
M-18	0.248	2.058	111	<	0.574
M-19	0.654	0.253	62	0.589	0.719
M-20	0.945	0.966	255	0.826	1.064
M-23	1.619	1.712	70,709	1.606	1.632
M-24	0.249	0.834	261	0.147	0.351
M-30	4.000	4.954	155	3.214	4.786
M-33	0.686	0.713	200	0.586	0.786
M-34	1.619	1.712	70,709	1.606	1.632
M-35	0.249	0.834	261	0.147	0.351
M-40	16.814	17.869	210	14.379	19.249
M-50	5.500	4.933	41	3.924	7.076
M-53	0.877	0.575	200	0.797	0.957
M-54	1.619	1.712	70,709	1.606	1.632
M-55	0.249	0.834	261	0.147	0.351
M-77	0.772	0.482	400	0.724	0.820
M-91	1.158	0.787	90	0.992	1.324

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-125

## GROUP 22 JUMPS CONDITIONAL TRANSITION PROBABILITIES

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-1	J-10	0.685	130	0.604	0.766
	J-50	0.315	130	0.234	0.396
J-10 <sup>a</sup>	J-11	0.000	199	<	0.001
	J-12	1.000	199	0.999	<
J-10 <sup>b</sup>	J-11	0.050	199	0.020	0.080
	J-12	0.950	199	0.920	0.980
J-12	J-13	0.000	108	<	0.002
	J-14	1.000	108	0.998	<
J-14	J-15	0.000	500	<	0.001
	J-16	1.000	500	0.999	<
J-16	J-17	0.000	500	<	0.001
	J-18	1.000	500	0.999	<
J-18	J-19	0.000	29,616	<	0.0002
	J-20	1.000	29,616	0.9998	<
J-21	J-22	0.000	c	c	c
	J-23	0.000	c	c	c
	J-24	0.000	c	c	c
J-24	J-25	0.000	c	c	c
	J-26	1.000	c	c	c
J-29	J-30	1.000	29,616	0.9998	<
	J-34	0.000	29,616	<	0.0002
J-30	J-32	0.982	8,327	0.979	0.985
	J-33	0.018	8,327	0.015	0.021
J-34	J-35	0.034	8,179	0.030	0.038
	J-99	0.966	8,179	0.962	0.970
J-36	J-37	0.069	17,070	0.065	0.073
	J-38	0.931	17,070	0.927	0.935

<sup>a</sup>No restrictions on processing time.<sup>b</sup>Processing time restricted to 60 days or less.<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-125 (CONT'D)

<u>Transition</u>		<u>Conditional probability</u>	<u>Sample size</u>	<u>Confidence limits</u>	
<u>From</u>	<u>To</u>			<u>Lower</u>	<u>Upper</u>
J-50 <sup>a</sup>	J-51	0.008	120	<	0.022
	J-52	0.992	120	0.978	<
J-50 <sup>b</sup>	J-51	0.017	120	<	0.037
	J-52	0.983	120	0.963	<
J-52	J-53	0.000	500	<	0.001
	J-54	1.000	500	0.999	<
J-54	J-55	0.000	500	<	0.001
	J-56	1.000	500	0.999	<
J-56	J-57	1.000	24,077	0.9998	<
	J-58	0.000	24,077	<	0.0002
J-59	J-60	0.000	c	c	c
	J-61	0.000	c	c	c
	J-62	0.000	c	c	c
J-62	J-63	0.000	c	c	c
	J-64	1.000	c	c	c
J-67	J-68	0.520	214,398	0.518	0.522
	J-88	0.480	214,398	0.478	0.482
J-68	J-70	0.922	111,555	0.920	0.924
	J-71	0.078	111,555	0.076	0.080
J-72	J-73	0.015	102,865	0.014	0.016
	J-88	0.985	102,865	0.984	0.986
J-74	J-75	0.077	6,883	0.071	0.083
	J-76	0.923	6,883	0.917	0.929
J-88	J-73	0.026	204,189	0.025	0.027
	J-99	0.974	204,189	0.973	0.975

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

TABLE D-126  
GROUP 22 JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Time (days)	Std. dev.	Sample size	Confidence limits	
				Lower	Upper
J-10 <sup>a</sup>	10.854	33.749	198	6.117	15.591
J-10 <sup>b</sup>	4.527	8.906	188	3.244	5.810
J-12	6.130	8.397	108	4.523	7.737
J-14	0.607	3.948	499	0.260	0.954
J-16	3.570	4.033	500	3.216	3.924
J-18	0.000	0.000	29,616	0.000	0.000
J-21	0.000	c	c	c	c
J-23	0.000	c	c	c	c
J-24	0.000	c	c	c	c
J-26	0.000	c	c	c	c
J-27	4.166	2.342	13,125	4.126	4.206
J-29	1.063	0.917	13,125	1.047	1.079
J-30	0.954	0.718	3,373	0.930	0.978
J-32	0.006	0.076	3,312	0.003	0.009
J-50 <sup>a</sup>	0.700	2.717	120	0.207	1.193
J-50 <sup>b</sup>	0.457	1.803	118	0.127	0.787
J-52	2.565	3.661	499	2.244	2.887
J-54	4.894	4.478	500	4.501	5.287
J-56	0.000	0.000	24,077	0.000	0.000
J-59	0.000	c	c	c	c
J-60	0.000	c	c	c	c
J-62	0.000	c	c	c	c
J-64	0.000	c	c	c	c
J-65	2.902	2.924	29,765	2.869	2.935
J-67	0.636	1.069	29,765	0.624	0.648
J-68	0.924	0.986	15,478	0.908	0.940
J-70	0.003	0.057	14,270	0.002	0.004

<sup>a</sup>No restrictions on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

<sup>c</sup>Due to central processing, these steps are not used.

ANNEX D-5

DETAILED RESULTS FOR DATA GROUPS 23 THROUGH 29

# ANNEX D-5

## DETAILED RESULTS FOR DATA GROUPS 23 THROUGH 29

This annex contains the detailed results of our analysis of information processing in JUMPS/MMS for the following data groups:

<u>Group</u>	<u>Unit</u>	<u>DSSN</u>	<u>SDPI</u>
23	East Coast, Ground	5190/6092	02
24	East Coast, Air	5136	02
25	West Coast, Ground	5167/6187	03
26	West Coast, Air	6796	03
27	East Coast	5136/5190/6092	02
28	West Coast	5167/6187/6796	03
29	Total	All above	02/03

TABLE D-127

MMS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group						
	23	24	25	26	27	28	29
Event not reported							
Unrestricted	0.002	0.000	0.000	0.000	0.002	0.000	0.001
Restricted	0.089	0.042	0.081	0.046	0.078	0.073	0.075
Primary distribution of reported events							
Accepted - passed to KC in UTR para. 1/7	0.920	0.930	0.936	0.939	0.922	0.937	0.928
Rejected to RU in UTR para. 2/6	0.010	0.009	0.006	0.004	0.010	0.005	0.008
Rejected to ACU	0.029	0.030	0.025	0.026	0.029	0.026	0.027
Deleted (UTR para. 4)	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Advisory message (UTR para. 5)	0.003	0.003	0.005	0.006	0.003	0.005	0.004
Suspense file	0.027	0.019	0.020	0.020	0.025	0.020	0.023
ACU/SDPI loss	0.008	0.007	0.005	0.003	0.008	0.005	0.006
UTR para. 2/6 entry not resubmitted	0.033	0.024	0.017	0.009	0.032	0.016	0.027
UTR para. 5 entry not resubmitted	0.155	0.095	0.016	0.010	0.141	0.014	0.062
CDPA/MCFC edit - poster failures							
Edit failures	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Poster failures	0.034	0.034	0.034	0.034	0.034	0.034	0.034

TABLE V-128

**Group**



TABLE D-129

## AVERAGE MMS TIMES (DAYS) FOR SELECTED TRANSITIONS

Transition	Group						
	23	24	25	26	27	28	29
From event to Unit Diary							
Unrestricted	15.53	8.00	20.03	16.23	13.75	19.09	16.11
Restricted	7.49	5.15	11.09	10.74	6.94	11.00	8.73
From UD to ACU scanning	2.77	3.21	2.34	2.79	2.88	2.45	2.69
From ACU scan to UTR	0.48	0.27	0.24	0.30	0.43	0.26	0.35
From UTR para. 2/6 to RU resubmission	5.42	6.15	5.50	6.54	5.57	5.70	5.61
From UTR para. 5 to RU resubmission	12.71	8.36	9.19	9.39	11.71	9.24	10.19
From suspense file to suspense file	8.69	9.82	11.93	13.82	8.89	12.39	10.26
From rejection to ACU to ACU resubmission	1.73	1.73	0.95	0.95	1.73	0.95	1.40
From rejection to ACU to AUTODIN entry	5.41	5.34	5.51	5.30	5.39	5.46	5.42
From ACU scan to CDPA edit	3.52	3.33	3.21	3.27	3.47	3.23	3.36
From AUTODIN entry to CDPA edit	2.64	2.64	2.64	2.64	2.64	2.64	2.64
From CDPA receipt to CMR posting	1.71	1.71	1.87	1.87	1.71	1.87	1.78
Event occurrence to CMR posting	24.02	16.69	27.35	24.06	22.29	26.54	24.17

TABLE D-130  
JUMPS PROBABILITIES FOR SELECTED  
CONDITIONAL OUTCOMES

Outcome	Group						
	23	24	25	26	27	28	29
Primary separation							
ABA event	0.501	0.496	0.347	0.328	0.500	0.342	0.430
TODE event	0.449	0.504	0.653	0.672	0.500	0.658	0.580
ABA event not reported	0.000	0.000	0.002	0.005	0.000	0.003	0.001
ABA lost at DO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ABA decentrally processed	1.000	0.000	1.000	0.000	0.753	0.964	0.757
ABA read by scanner	0.844	0.000	0.966	0.000	0.844	0.966	0.885
ABA scanner rejects lost	0.373	0.000	0.330	0.000	0.373	0.330	0.371
TODE event not reported	0.001	0.000	0.000	0.000	0.000	0.000	0.000
TODE document lost at DO	0.103	0.000	0.000	0.000	0.079	0.000	0.038
TODE lost at DO	0.113	0.000	0.000	0.000	0.084	0.000	0.039
TODE decentrally processed	1.000	0.000	1.000	0.000	0.738	0.753	0.746
TODE read by scanner	0.897	0.000	0.963	0.000	0.897	0.963	0.933
TODE scanner rejects lost	0.002	0.000	0.328	0.000	0.002	0.328	0.099
MCFC scanner rejects of ABA	0.078	0.078	0.078	0.078	0.078	0.078	0.078
MCFC posting failure for ABA	0.041	0.041	0.041	0.041	0.041	0.041	0.041
MCFC scanner reject of TODE	0.018	0.018	0.018	0.018	0.018	0.018	0.018
MCFC posting failure for TODE	0.034	0.034	0.034	0.034	0.034	0.034	0.034

TABLE D-131  
JUMPS PROBABILITIES FOR THE DISTRIBUTION OF STATEMENTS  
AMONG SELECTED TERMINAL OUTCOMES

Outcome	Group						
	23	24	25	26	27	28	29
ABA event not reported	0.000	0.000	0.002	0.005	0.000	0.003	0.001
ABA lost at DO	0.099	0.000	0.034	0.000	0.074	0.026	0.057
ABA rejected at MCFC - not resubmitted	0.004	0.000	0.002	0.000	0.003	0.002	0.002
TODE event not reported	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TODE document lost at RU	0.008	0.000	0.000	0.000	0.006	0.000	0.003
TODE document lost at DO	0.102	0.000	0.000	0.000	0.078	0.000	0.038
TODE lost at DO	0.100	0.000	0.000	0.000	0.076	0.000	0.037
TODE rejected at ACU - lost	0.000	0.000	0.013	0.000	0.000	0.010	0.005
TODE rejected at MCFC - lost	0.000	0.000	0.001	0.000	0.000	0.001	0.000
ABA posted to MMPA	0.896	1.000	0.962	0.995	0.899	0.970	0.939
TODE posted to MMPA	0.788	1.000	0.986	1.000	0.838	0.989	0.917

TABLE D-132

## AVERAGE JUMPS TIMES (DAYS) FOR SELECTED ABA TRANSITIONS

Transition	Group						
	23	24	25	26	27	28	29
From ABA event to ABA							
Unrestricted	0.93	0.30	0.92	0.79	0.78	0.89	0.82
Restricted	0.82	0.30	0.80	0.74	0.70	0.78	0.73
From ABA preparation to receipt at DO	1.19	2.23	4.45	2.57	1.43	4.01	2.33
From ABA receipt at DO to DTL	7.99	3.36	5.05	4.89	6.91	5.01	6.24
From DTL preparation to decentral scan	0.02	0.00	0.20	0.00	0.01	0.15	0.06
From decentral scan to mailing	2.21	0.00	1.96	0.00	2.21	1.96	2.12
From DTL preparation to mailing	4.03	0.00	2.09	0.00	3.06	1.68	2.59
From ABA receipt at NCFC to central scan	0.64	0.64	0.64	0.64	0.64	0.64	0.64
From central scan to posting to NMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
From receipt at NCFC to posting	1.26	1.21	1.25	1.21	1.25	1.24	1.26
From ABA event to posting to NMPA	18.44	9.99	16.78	12.36	16.45	15.73	16.55

TABLE D-133  
AVERAGE JUMPS TIMES (DAYS) FOR SELECTED TODE TRANSITIONS

Transition	Group						
	23	24	25	26	27	28	29
From TODE event to TODE document							
Unrestricted	26.95	20.90	22.21	9.46	25.51	19.00	22.20
Restricted	13.63	12.03	8.67	5.37	12.98	7.84	10.36
From TODE document preparation to receipt at DO	9.96	5.15	12.11	7.63	8.82	10.98	9.92
From document receipt at DO to TODE	4.50	3.25	2.25	0.61	4.20	1.84	2.99
From TODE to DTL preparation	4.15	3.09	3.25	3.57	3.87	3.33	3.59
From DTL preparation to decentral scan	0.00	0.00	0.10	0.00	0.00	0.08	0.04
From decentral scan to mailing	2.94	0.00	7.71	0.00	2.94	7.71	5.62
From DTL preparation to mailing	5.08	0.00	8.17	0.00	3.63	6.09	4.99
From TODE receipt at MCFC to central scan	1.06	1.06	1.06	1.06	1.06	1.06	1.06
From central scan to posting to MMPA	0.01	0.01	0.01	0.01	0.01	0.01	0.01
From receipt at MCFC to posting to MMPA	1.40	1.35	1.14	2.09	1.39	1.39	1.39
From TODE event to posting to MMPA	56.20	37.90	53.29	27.53	51.58	46.80	49.24

TAB D-5-1

CONDITIONAL TRANSITION PROBABILITIES AND TIMES FOR DATA GROUPS  
23 THROUGH 29

TABLE D-134

## MMS CONDITIONAL TRANSITION PROBABILITIES

Transition		Group						
From	To	23	24	25	26	27	28	29
M-1 <sup>a</sup>	M-2	0.998	1.000	1.000	1.000	0.998	1.000	0.999
	M-99	0.002	0.000	0.000	0.000	0.002	0.000	0.001
M-1 <sup>b</sup>	M-2	0.911	0.958	0.919	0.954	0.922	0.927	0.925
	M-99	0.989	0.042	0.081	0.046	0.078	0.073	0.075
M-4	M-5	0.988	0.988	0.997	0.997	0.988	0.997	0.992
	M-12	0.012	0.012	0.003	0.003	0.012	0.003	0.008
M-6	M-7	0.826	0.837	0.917	0.923	0.828	0.919	0.868
	M-20	0.029	0.030	0.025	0.026	0.029	0.026	0.027
	M-30	0.010	0.009	0.006	0.004	0.010	0.005	0.008
	M-40	0.027	0.019	0.020	0.020	0.025	0.020	0.023
	M-50	0.003	0.003	0.005	0.006	0.003	0.005	0.004
	M-60	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	M-70	0.008	0.007	0.005	0.003	0.008	0.005	0.006
	M-77	0.094	0.093	0.019	0.016	0.094	0.018	0.060
M-9	M-10	0.999	0.999	0.999	0.999	0.999	0.999	0.999
	M-91	0.001	0.001	0.001	0.001	0.001	0.001	0.001
M-10	M-11	0.966	0.966	0.966	0.966	0.966	0.966	0.966
	M-91	0.034	0.034	0.034	0.034	0.034	0.034	0.034
M-16	M-7	0.893	0.896	0.503	0.503	0.894	0.503	0.755
	M-20	0.011	0.011	0.071	0.071	0.011	0.071	0.032
	M-30	0.000	0.000	0.004	0.004	0.000	0.004	0.001
	M-40	0.003	0.003	0.015	0.015	0.003	0.015	0.007
	M-50	0.056	0.056	0.147	0.147	0.056	0.147	0.088
	M-60	0.000	0.000	0.008	0.008	0.000	0.008	0.003
	M-70	0.008	0.006	0.143	0.143	0.008	0.143	0.055
	M-77	0.017	0.017	0.102	0.102	0.017	0.102	0.047
M-17	M-81	0.011	0.011	0.008	0.008	0.011	0.008	0.010
	M-7	0.345	0.828	0.475	0.413	0.453	0.463	0.456
	M-20	0.013	0.000	0.026	0.043	0.010	0.029	0.017
	M-30	0.018	0.000	0.027	0.036	0.014	0.029	0.019
	M-40	0.002	0.000	0.006	0.006	0.002	0.006	0.003
	M-50	0.046	0.033	0.031	0.011	0.043	0.027	0.038
	M-60	0.023	0.000	0.005	0.003	0.018	0.005	0.013
	M-70	0.004	0.004	0.002	0.008	0.004	0.003	0.004
	M-77	0.126	0.134	0.324	0.416	0.128	0.342	0.199
	M-81	0.424	0.000	0.105	0.065	0.329	0.097	0.252

<sup>a</sup>No restriction on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-134 (CONT'D)

Transition		Group						
From	To	23	24	25	26	27	28	29
M-18	M-7	0.530	0.774	0.733	0.555	0.583	0.704	0.657
	M-20	0.103	0.000	0.059	0.101	0.030	0.066	0.071
	M-30	0.012	0.000	0.016	0.006	0.009	0.014	0.012
	M-40	0.024	0.000	0.014	0.013	0.019	0.014	0.015
	M-50	0.094	0.000	0.046	0.113	0.073	0.057	0.063
	M-60	0.011	0.000	0.009	0.000	0.008	0.008	0.008
	M-70	0.011	0.226	0.014	0.056	0.057	0.021	0.035
	M-77	0.147	0.000	0.109	0.156	0.110	0.117	0.114
	M-81	0.077	0.000	0.000	0.000	0.060	0.000	0.023
M-19	M-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	M-20	0.032	0.032	0.032	0.032	0.032	0.032	0.032
	M-30	0.008	0.008	0.008	0.008	0.008	0.008	0.008
	M-40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	M-50	0.036	0.036	0.147	0.147	0.036	0.147	0.085
	M-60	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	M-77	0.924	0.924	0.813	0.813	0.924	0.813	0.875
M-20	M-21	0.275	0.275	0.438	0.438	0.275	0.438	0.344
	M-22	0.014	0.014	0.030	0.030	0.014	0.030	0.021
	M-23	0.711	0.711	0.532	0.532	0.711	0.532	0.635
M-23	M-24	0.026	0.026	0.004	0.004	0.026	0.004	0.018
	M-25	0.947	0.974	0.996	0.996	0.974	0.996	0.982
M-30	M-31	0.088	0.000	0.008	0.024	0.069	0.011	0.051
	M-32	0.033	0.024	0.017	0.009	0.032	0.016	0.027
	M-33	0.879	0.976	0.975	0.967	0.899	0.973	0.922
M-40	M-7	0.921	0.966	0.751	0.696	0.929	0.739	0.854
	M-20	0.006	0.000	0.028	0.012	0.005	0.024	0.013
	M-30	0.001	0.000	0.002	0.001	0.000	0.002	0.001
	M-50	0.005	0.007	0.024	0.046	0.005	0.029	0.014
	M-60	0.011	0.011	0.094	0.117	0.011	0.100	0.046
	M-77	0.047	0.016	0.079	0.092	0.042	0.082	0.058
	M-80	0.001	0.000	0.006	0.270	0.001	0.011	0.005
	M-81	0.301	0.000	0.007	0.000	0.000	0.002	0.001
	M-83	0.007	0.000	0.013	0.010	0.006	0.012	0.008
M-50	M-51	0.667	0.741	0.789	0.884	0.684	0.815	0.765
	M-52	0.155	0.095	0.016	0.010	0.141	0.014	0.062
	M-53	0.178	0.165	0.195	0.106	0.175	0.171	0.173
M-54	M-55	0.116	0.017	0.058	0.054	0.096	0.057	0.073
	M-57	0.884	0.983	0.942	0.946	0.904	0.943	0.927



TABLE D-135  
MMS CONDITIONAL TRANSITION TIMES

Transition from	Group						
	23	24	25	26	27	28	29
M-1 <sup>a</sup>	15.528	8.001	20.027	16.228	13.752	19.092	16.107
M-1 <sup>b</sup>	7.492	5.148	11.086	10.741	6.939	11.001	8.730
M-2	1.716	1.719	2.053	1.881	1.717	2.011	1.847
M-3	1.034	1.489	0.284	0.912	1.161	0.438	0.842
M-4	2.000	2.000	1.619	1.619	2.006	1.619	1.833
M-6	0.478	0.271	0.242	0.295	0.429	0.255	0.352
M-7	0.938	0.938	0.772	0.772	0.938	0.772	0.867
M-8	1.705	1.705	1.871	1.871	1.705	1.875	1.778
M-12	2.670	2.670	0.249	0.249	2.670	0.249	2.274
M-16	1.220	1.220	1.793	1.793	1.220	1.793	1.423
M-17	1.588	0.825	1.808	2.046	1.417	1.854	1.563
M-18	0.686	0.479	1.782	4.226	0.641	2.187	1.590
M-19	0.665	0.665	0.654	0.654	0.665	0.654	0.660
M-20	1.728	1.728	0.945	0.945	1.728	0.945	1.397
M-23	2.000	2.000	1.619	1.619	2.000	1.619	1.867
M-24	2.670	2.670	0.249	0.249	2.670	0.249	2.485
M-30	5.415	6.154	5.500	6.536	5.567	5.704	5.610
M-33	1.312	1.226	0.407	0.686	1.284	0.462	1.010
M-34	2.000	2.000	1.619	1.619	2.000	1.619	1.887
M-35	2.670	2.670	0.249	0.249	2.670	0.249	2.259
M-40	8.689	9.824	11.928	13.818	8.891	12.388	10.258
M-50	12.713	8.358	9.190	9.390	11.710	9.244	10.185
M-53	0.979	1.454	0.968	0.877	1.108	0.953	1.010
M-54	2.000	2.000	1.619	1.619	2.000	1.619	1.770
M-55	2.670	2.670	0.249	0.249	2.670	0.249	1.528
M-77	0.938	0.880	0.772	0.772	0.924	0.772	0.888
M-91	0.385	0.385	1.158	1.158	0.385	1.158	0.725

<sup>a</sup>No restriction on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-136  
JUMPS CONDITIONAL TRANSITION PROBABILITIES

Transition		Group						
From	To	23	24	25	26	27	28	29
J-1	J-10	0.499	0.504	0.653	0.672	0.500	0.658	0.570
	J-50	0.501	0.496	0.347	0.328	0.500	0.342	0.430
J-10 <sup>a</sup>	J-11	0.001	0.000	0.000	0.000	0.000	0.000	0.000
	J-12	0.999	1.000	1.000	1.000	1.000	1.000	1.000
J-10 <sup>b</sup>	J-11	0.135	0.086	0.111	0.044	0.123	0.094	0.108
	J-12	0.865	0.914	0.889	0.956	0.877	0.906	0.892
J-12	J-13	0.008	0.000	0.000	0.000	0.006	0.000	0.003
	J-14	0.992	1.000	1.000	1.000	0.994	1.000	0.997
J-14	J-15	0.103	0.000	0.000	0.000	0.079	0.000	0.038
	J-16	0.897	1.000	1.000	1.000	0.921	1.000	0.962
J-16	J-17	0.113	0.000	0.000	0.000	0.084	0.000	0.039
	J-18	0.887	1.000	1.000	1.000	0.916	1.000	0.961
J-18	J-19	1.000	0.000	1.000	0.000	0.738	0.753	0.746
	J-20	0.000	1.000	0.000	1.000	0.262	0.247	0.254
J-21	J-22	0.000	0.000	0.001	0.000	0.000	0.001	0.000
	J-23	0.897	0.000	0.963	0.000	0.897	0.963	0.933
	J-24	0.103	0.000	0.036	0.000	0.103	0.036	0.067
J-24	J-25	0.002	0.000	0.328	0.000	0.002	0.318	0.099
	J-26	0.998	1.000	0.672	1.000	0.998	0.682	0.901
J-29	J-30	0.257	1.000	0.000	1.000	0.256	0.254	0.255
	J-34	0.743	0.000	1.000	0.000	0.744	0.746	0.745
J-30	J-32	0.982	0.982	0.982	0.982	0.982	0.982	0.982
	J-33	0.018	0.018	0.018	0.018	0.018	0.018	0.018
J-34	J-35	0.034	0.034	0.034	0.034	0.034	0.034	0.034
	J-99	0.966	0.966	0.966	0.966	0.966	0.966	0.966
J-36	J-37	0.069	0.069	0.069	0.069	0.069	0.069	0.069
	J-38	0.931	0.931	0.931	0.931	0.931	0.931	0.931

<sup>a</sup>No restriction on processing time.

<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-136 (CONT'D)

Transition		Group						
From	To	23	24	25	26	27	28	29
J-50 <sup>a</sup>	J-51	0.000	0.000	0.002	0.005	0.000	0.003	0.001
	J-52	1.000	1.000	0.998	0.995	1.000	0.997	0.999
J-50 <sup>b</sup>	J-51	0.001	0.000	0.007	0.008	0.001	0.007	0.003
	J-52	0.999	1.000	0.993	0.992	0.999	0.993	0.997
J-52	J-53	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	J-54	1.000	1.000	1.000	1.000	1.000	1.000	1.000
J-54	J-55	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	J-56	1.000	1.000	1.000	1.000	1.000	1.000	1.000
J-56	J-57	0.000	1.000	0.000	1.000	0.247	0.236	0.243
	J-58	1.000	0.000	1.000	0.000	0.753	0.764	0.757
J-59	J-60	0.844	0.000	0.966	0.000	0.844	0.966	0.885
	J-61	0.056	0.000	0.034	0.000	0.056	0.034	0.048
	J-62	0.100	0.000	0.000	0.000	0.100	0.000	0.067
J-62	J-63	0.373	0.000	0.330	0.000	0.373	0.250	0.371
	J-64	0.627	1.000	0.670	1.000	0.627	0.750	0.629
J-67	J-68	0.520	0.520	0.520	0.520	0.520	0.520	0.520
	J-88	0.480	0.480	0.480	0.480	0.480	0.480	0.480
J-68	J-70	0.922	0.922	0.922	0.922	0.922	0.922	0.922
	J-71	0.078	0.078	0.078	0.078	0.078	0.078	0.078
J-72	J-73	0.015	0.015	0.015	0.015	0.015	0.015	0.015
	J-88	0.985	0.985	0.985	0.985	0.985	0.985	0.985
J-74	J-75	0.077	0.077	0.077	0.077	0.077	0.077	0.077
	J-76	0.923	0.923	0.923	0.923	0.923	0.923	0.923
J-88	J-73	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	J-99	0.974	0.974	0.974	0.974	0.974	0.974	0.974

<sup>a</sup>No restriction on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TABLE D-137

## JUMPS CONDITIONAL TRANSITION TIMES

Transition from	Group						
	23	24	25	26	27	28	29
J-10 <sup>a</sup>	26.951	20.900	22.205	9.459	25.511	19.003	22.196
J-10 <sup>b</sup>	13.632	12.029	8.670	5.369	12.976	7.841	10.361
J-12	9.962	5.149	12.108	7.633	8.815	10.984	9.920
J-14	4.495	3.252	2.247	0.607	4.197	1.835	2.990
J-16	4.148	3.092	3.251	3.570	3.874	3.331	3.585
J-18	0.003	0.000	0.101	0.000	0.002	0.076	0.042
J-21	1.079	0.000	0.075	0.000	1.079	0.075	0.533
J-23	2.941	0.000	7.712	0.000	2.941	7.712	5.616
J-24	0.761	0.000	3.274	0.000	0.761	3.173	1.499
J-26	7.355	0.000	8.060	0.000	7.301	7.696	7.393
J-27	4.166	4.166	4.166	4.166	4.166	4.166	4.166
J-29	1.063	1.063	1.063	1.063	1.063	1.063	1.063
J-30	0.954	0.954	0.954	0.954	0.954	0.954	0.954
J-32	0.006	0.006	0.006	0.006	0.006	0.006	0.006
J-50 <sup>a</sup>	0.933	0.298	0.915	0.787	0.784	0.885	0.820
J-50 <sup>b</sup>	0.822	0.298	0.796	0.742	0.699	0.783	0.713
J-52	1.187	2.226	4.452	2.525	1.430	4.008	2.332
J-54	7.994	3.355	5.046	4.894	6.908	5.010	6.244
J-56	0.017	0.000	0.197	0.000	0.014	0.151	0.059
J-59	1.038	0.000	1.845	0.000	1.038	1.845	1.257
J-60	2.207	0.000	1.958	0.000	2.207	1.958	2.117
J-62	7.981	0.000	5.111	0.000	7.904	3.874	7.819
J-64	5.465	0.000	4.136	0.000	5.381	2.801	5.316
J-65	2.902	2.902	2.902	2.902	2.902	2.902	2.902
J-67	0.636	0.636	0.636	0.636	0.636	0.636	0.636
J-68	0.924	0.924	0.924	0.924	0.924	0.924	0.924
J-70	0.003	0.003	0.003	0.003	0.003	0.003	0.003

<sup>a</sup>No restriction on processing time.<sup>b</sup>Processing time restricted to 60 days or less.

TAB D-5-2

COMPLETE SET OF MATRICES FOR DATA GROUP 29

TABLE D-138  
MMS MATRIX (Q) OF CONDITIONAL PROBABILITIES  
FOR TRANSITIONS TO TRANSIENT STATES

	1	2	3	4	5	6	7	8	9
1	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.992	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.868	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.755	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.456	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.657	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.854	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-138 (CONT'D)

	10	12	13	16	17	18	19	20	23
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.071	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.635
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
25	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000

TABLE D-138 (CONT'D)

	24	25	30	33	34	35	36	37	40
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.023
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.007
17	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.003
18	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.015
19	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.018	0.982	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.922	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.071	0.000	0.929	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
36	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



TABLE D-138 (CONT'D)

	50	53	54	55	56	57	77	91
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.004	0.000	0.000	0.000	0.000	0.000	0.061	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.034
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.088	0.000	0.000	0.000	0.000	0.000	0.047	0.000
17	0.038	0.000	0.000	0.000	0.000	0.000	0.199	0.000
18	0.063	0.000	0.000	0.000	0.000	0.000	0.114	0.000
19	0.085	0.000	0.000	0.000	0.000	0.000	0.875	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.014	0.000	0.000	0.000	0.000	0.000	0.058	0.000
50	0.000	0.173	0.000	0.000	0.000	0.000	0.000	0.000
53	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.073	0.000	0.927	0.000	0.000
55	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
56	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-139  
MMS MATRIX (R) OF CONDITIONAL PROBABILITIES  
FOR TRANSITIONS TO ABSORBING STATES

	11	21	22	31	32	51	52
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.966	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.344	0.021	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.051	0.027	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.765	0.063
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-139 (CONT'D)

	60	70	80	81	83	99
1	0.000	0.000	0.000	0.000	0.000	0.001
2	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000
6	0.002	0.004	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000
16	0.003	0.055	0.000	0.010	0.000	0.000
17	0.013	0.004	0.000	0.252	0.000	0.000
18	0.008	0.035	0.000	0.023	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000
40	0.046	0.000	0.005	0.001	0.008	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000
53	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-140

MMS MATRIX (N) OF EXPECTED NUMBER  
OF PASSAGES THROUGH TRANSIENT STATES

	1	2	3	4	5	6	7	8	9
1	1.000	0.999	0.999	1.007	0.999	0.999	0.906	1.001	1.001
2	0.000	1.000	1.000	1.008	1.000	1.000	0.907	1.002	1.002
3	0.000	0.000	1.000	1.008	1.000	1.000	0.907	1.002	1.002
4	0.000	0.000	0.000	1.008	1.000	1.000	0.907	1.002	1.002
5	0.000	0.000	0.000	0.000	1.000	1.000	0.907	1.002	1.002
6	0.000	0.000	0.000	0.000	0.000	1.000	0.907	1.002	1.002
7	0.000	0.000	0.000	0.000	0.000	0.000	1.001	1.033	1.033
8	0.000	0.000	0.000	0.000	0.000	0.000	0.001	1.033	1.033
9	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.033	1.033
10	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.032	0.032
12	0.000	0.000	0.000	1.008	1.000	1.000	0.907	1.002	1.002
13	0.000	0.000	0.000	1.008	1.000	1.000	0.907	1.002	1.002
16	0.000	0.000	0.000	0.000	0.000	0.000	0.790	0.868	0.868
17	0.000	0.000	0.000	0.000	0.000	0.000	0.481	0.707	0.707
18	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.868	0.868
19	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.939	0.939
20	0.000	0.000	0.000	0.000	0.000	0.000	0.502	0.551	0.551
23	0.000	0.000	0.000	0.000	0.000	0.000	0.790	0.868	0.868
24	0.000	0.000	0.000	0.000	0.000	0.000	0.790	0.868	0.868
25	0.000	0.000	0.000	0.000	0.000	0.000	0.790	0.868	0.868
30	0.000	0.000	0.000	0.000	0.000	0.000	0.444	0.652	0.652
33	0.000	0.000	0.000	0.000	0.000	0.000	0.481	0.707	0.707
34	0.000	0.000	0.000	0.000	0.000	0.000	0.481	0.707	0.707
35	0.000	0.000	0.000	0.000	0.000	0.000	0.481	0.707	0.707
36	0.000	0.000	0.000	0.000	0.000	0.000	0.481	0.707	0.707
37	0.000	0.000	0.000	0.000	0.000	0.000	0.481	0.707	0.707
40	0.000	0.000	0.000	0.000	0.000	0.000	0.864	0.952	0.952
50	0.000	0.000	0.000	0.000	0.000	0.000	0.124	0.150	0.150
53	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.868	0.868
54	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.868	0.868
55	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.868	0.868
56	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.868	0.868
57	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.868	0.868
77	0.000	0.000	0.000	0.000	0.000	0.000	0.001	1.033	1.033
91	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.939	0.939

TABLE D-140 (CONT'D)

	10	12	13	16	17	18	19	20	23
1	1.000	0.008	0.008	0.019	0.008	0.002	0.035	0.030	0.019
2	1.001	0.008	0.008	0.019	0.008	0.002	0.035	0.030	0.019
3	1.001	0.008	0.008	0.019	0.008	0.002	0.035	0.030	0.019
4	1.001	0.008	0.008	0.019	0.008	0.002	0.035	0.030	0.019
5	1.001	0.000	0.000	0.019	0.008	0.002	0.035	0.030	0.019
6	1.001	0.000	0.000	0.019	0.008	0.002	0.035	0.030	0.019
7	1.032	0.000	0.000	0.001	0.000	0.001	0.036	0.001	0.001
8	1.032	0.000	0.000	0.001	0.000	0.001	0.036	0.001	0.001
9	1.032	0.000	0.000	0.001	0.000	0.001	0.036	0.001	0.001
10	1.032	0.000	0.000	0.001	0.000	0.001	0.035	0.001	0.001
12	1.001	1.008	1.008	0.019	0.008	0.002	0.035	0.030	0.019
13	1.001	0.008	1.008	0.019	0.008	0.002	0.035	0.030	0.019
16	0.867	0.000	0.000	1.022	0.002	0.016	0.030	0.035	0.023
17	0.706	0.000	0.000	0.012	1.018	0.007	0.025	0.019	0.012
18	0.867	0.000	0.000	0.048	0.012	1.012	0.030	0.075	0.049
19	0.938	0.000	0.000	0.022	0.008	0.016	1.033	0.035	0.023
20	0.551	0.000	0.000	0.649	0.001	0.010	0.019	1.022	0.662
23	0.867	0.000	0.000	1.022	0.002	0.016	0.030	0.035	1.041
24	0.867	0.000	0.000	1.022	0.002	0.016	0.030	0.035	1.041
25	0.867	0.000	0.000	1.022	0.002	0.016	0.030	0.035	0.023
30	0.651	0.000	0.000	0.011	0.939	0.007	0.023	0.017	0.011
33	0.706	0.000	0.000	0.012	1.018	0.007	0.025	0.019	0.012
34	0.706	0.000	0.000	0.012	1.018	0.007	0.025	0.019	0.012
35	0.706	0.000	0.000	0.012	1.018	0.007	0.025	0.019	0.012
36	0.706	0.000	0.000	0.012	1.018	0.007	0.025	0.019	0.012
37	0.706	0.000	0.000	0.012	1.018	0.007	0.025	0.019	0.012
40	0.951	0.000	0.000	0.009	0.001	0.003	0.033	0.014	0.009
50	0.150	0.000	0.000	0.008	0.002	0.175	0.005	0.013	0.008
53	0.867	0.000	0.000	0.048	0.012	1.012	0.030	0.075	0.049
54	0.867	0.000	0.000	0.048	0.012	1.012	0.030	0.075	0.049
55	0.867	0.000	0.000	0.048	0.012	1.012	0.030	0.075	0.049
56	0.867	0.000	0.000	0.048	0.012	1.012	0.030	0.075	0.049
57	0.867	0.000	0.000	0.048	0.012	1.012	0.030	0.075	0.049
77	1.032	0.000	0.000	0.001	0.000	0.001	0.036	0.001	0.001
91	0.938	0.000	0.000	0.022	0.008	0.016	1.033	0.035	0.023

TABLE D-140 CONT'D)

	24	25	30	33	34	35	36	37	40
1	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
2	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
3	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
4	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
5	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
6	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
7	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
13	0.000	0.019	0.008	0.008	0.008	0.001	0.001	0.008	0.023
16	0.000	0.022	0.002	0.002	0.002	0.000	0.000	0.002	0.008
17	0.000	0.012	0.019	0.018	0.019	0.001	0.001	0.018	0.003
18	0.001	0.048	0.013	0.012	0.013	0.001	0.001	0.012	0.016
19	0.000	0.022	0.009	0.008	0.009	0.001	0.001	0.008	0.000
20	0.012	0.649	0.001	0.001	0.001	0.000	0.000	0.001	0.005
23	0.019	1.022	0.002	0.002	0.002	0.000	0.000	0.002	0.008
24	1.019	1.022	0.002	0.002	0.002	0.000	0.000	0.002	0.008
25	0.000	1.022	0.002	0.002	0.002	0.000	0.000	0.002	0.008
30	0.000	0.011	1.018	0.939	1.011	0.072	0.072	0.939	0.003
33	0.000	0.012	0.019	1.018	1.096	0.078	0.078	1.018	0.003
34	0.000	0.012	0.019	0.018	1.096	0.078	0.078	1.018	0.003
35	0.000	0.012	0.019	0.018	1.096	1.078	1.078	1.018	0.003
36	0.000	0.012	0.019	0.018	1.096	0.078	1.078	1.018	0.003
37	0.000	0.012	0.019	0.018	0.019	0.001	0.001	1.018	0.003
40	0.000	0.009	0.001	0.001	0.001	0.000	0.000	0.001	1.000
50	0.000	0.008	0.002	0.002	0.002	0.000	0.000	0.002	0.003
53	0.001	0.048	0.013	0.012	0.013	0.001	0.001	0.012	0.016
54	0.001	0.048	0.013	0.012	0.013	0.001	0.001	0.012	0.016
55	0.001	0.048	0.013	0.012	0.013	0.001	0.001	0.012	0.016
56	0.001	0.048	0.013	0.012	0.013	0.001	0.001	0.012	0.016
57	0.001	0.048	0.013	0.012	0.013	0.001	0.001	0.012	0.016
77	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.022	0.009	0.008	0.009	0.001	0.001	0.008	0.000

TABLE D-140 (CONT'D)

	50	53	54	55	56	57	77	91
1	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
2	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
3	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
4	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
5	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
6	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
7	0.003	0.001	0.001	0.000	0.000	0.001	0.032	0.036
8	0.003	0.001	0.001	0.000	0.000	0.001	0.032	0.036
9	0.003	0.001	0.001	0.000	0.000	0.001	0.032	0.036
10	0.003	0.001	0.001	0.000	0.000	0.001	0.031	0.035
12	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
13	0.010	0.002	0.002	0.000	0.000	0.002	0.095	0.035
16	0.094	0.016	0.018	0.001	0.001	0.016	0.077	0.030
17	0.042	0.007	0.008	0.001	0.001	0.007	0.226	0.025
18	0.071	0.012	0.013	0.001	0.001	0.012	0.148	0.030
19	0.091	0.016	0.017	0.001	0.001	0.016	0.908	0.033
20	0.060	0.010	0.011	0.001	0.001	0.010	0.049	0.019
23	0.094	0.016	0.018	0.001	0.001	0.016	0.077	0.030
24	0.094	0.016	0.018	0.001	0.001	0.016	0.077	0.030
25	0.094	0.016	0.018	0.001	0.001	0.016	0.077	0.030
30	0.039	0.007	0.007	0.001	0.001	0.007	0.208	0.023
33	0.042	0.007	0.008	0.001	0.001	0.007	0.226	0.025
34	0.042	0.007	0.008	0.001	0.001	0.007	0.226	0.025
35	0.042	0.007	0.008	0.001	0.001	0.007	0.226	0.025
36	0.042	0.007	0.008	0.001	0.001	0.007	0.226	0.025
37	0.042	0.007	0.008	0.001	0.001	0.007	0.226	0.025
40	0.018	0.003	0.003	0.000	0.000	0.003	0.088	0.033
50	1.012	0.175	0.189	0.014	0.014	0.175	0.026	0.005
53	0.071	1.012	1.092	0.080	0.080	1.012	0.148	0.030
54	0.071	0.012	1.092	0.080	0.080	1.012	0.148	0.030
55	0.071	0.012	1.092	1.060	1.080	1.012	0.148	0.030
56	0.071	0.012	1.092	0.080	1.080	1.012	0.148	0.030
57	0.071	0.012	0.013	0.001	0.001	1.012	0.148	0.030
77	0.003	0.001	0.001	0.000	0.000	0.001	1.032	0.036
91	0.091	0.016	0.017	0.001	0.001	0.016	0.908	1.033

TABLE D-141  
MMS MATRIX (H) OF PROBABILITY OF  
PASSAGE THROUGH A TRANSIENT STATE

	1	2	3	4	5	6	7	8	9
1	0.000	0.999	0.999	0.999	0.999	0.999	0.905	0.969	0.969
2	0.000	0.000	1.000	1.000	1.000	1.000	0.906	0.970	0.970
3	0.000	0.000	0.000	1.000	1.000	1.000	0.906	0.970	0.970
4	0.000	0.000	0.000	0.008	1.000	1.000	0.906	0.970	0.970
5	0.000	0.000	0.000	0.000	0.000	1.000	0.906	0.970	0.970
6	0.000	0.000	0.000	0.000	0.000	0.000	0.906	0.970	0.970
7	0.000	0.000	0.000	0.000	0.000	0.000	0.001	1.000	1.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.032	1.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.032	0.032
10	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.031	0.031
12	0.000	0.000	0.000	1.000	1.000	1.000	0.906	0.970	0.970
13	0.000	0.000	0.000	1.000	1.000	1.000	0.906	0.970	0.970
16	0.000	0.000	0.000	0.000	0.000	0.000	0.789	0.840	0.840
17	0.000	0.000	0.000	0.000	0.000	0.000	0.480	0.684	0.684
18	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.841	0.841
19	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.910	0.910
20	0.000	0.000	0.000	0.000	0.000	0.000	0.502	0.534	0.534
23	0.000	0.000	0.000	0.000	0.000	0.000	0.789	0.840	0.840
24	0.000	0.000	0.000	0.000	0.000	0.000	0.789	0.840	0.840
25	0.000	0.000	0.000	0.000	0.000	0.000	0.789	0.840	0.840
30	0.000	0.000	0.000	0.000	0.000	0.000	0.443	0.631	0.631
33	0.000	0.000	0.000	0.000	0.000	0.000	0.480	0.684	0.684
34	0.000	0.000	0.000	0.000	0.000	0.000	0.480	0.684	0.684
35	0.000	0.000	0.000	0.000	0.000	0.000	0.480	0.684	0.684
36	0.000	0.000	0.000	0.000	0.000	0.000	0.480	0.684	0.684
37	0.000	0.000	0.000	0.000	0.000	0.000	0.480	0.684	0.684
40	0.000	0.000	0.000	0.000	0.000	0.000	0.863	0.921	0.921
50	0.000	0.000	0.000	0.000	0.000	0.000	0.124	0.145	0.145
53	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.841	0.841
54	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.841	0.841
55	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.841	0.841
56	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.841	0.841
57	0.000	0.000	0.000	0.000	0.000	0.000	0.720	0.841	0.841
77	0.000	0.000	0.000	0.000	0.000	0.000	0.001	1.000	1.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.910	0.910



TABLE D-141 (CONT'D)

	10	12	13	16	17	18	19	20	23
1	0.969	0.008	0.008	0.018	0.007	0.002	0.034	0.029	0.018
2	0.970	0.008	0.008	0.018	0.007	0.002	0.034	0.029	0.018
3	0.970	0.008	0.008	0.018	0.007	0.002	0.034	0.029	0.018
4	0.970	0.008	0.008	0.018	0.007	0.002	0.034	0.029	0.018
5	0.970	0.000	0.000	0.018	0.007	0.002	0.034	0.029	0.018
6	0.970	0.000	0.000	0.018	0.007	0.002	0.034	0.029	0.018
7	1.000	0.000	0.000	0.001	0.000	0.001	0.035	0.001	0.001
8	1.000	0.000	0.000	0.001	0.000	0.001	0.035	0.001	0.001
9	1.000	0.000	0.000	0.001	0.000	0.001	0.035	0.001	0.001
10	0.031	0.000	0.000	0.001	0.000	0.001	0.034	0.001	0.001
12	0.970	0.008	1.000	0.018	0.007	0.002	0.034	0.029	0.018
13	0.970	0.008	0.008	0.018	0.007	0.002	0.034	0.029	0.018
16	0.840	0.000	0.000	0.022	0.002	0.016	0.029	0.034	0.022
17	0.684	0.000	0.000	0.012	0.018	0.007	0.024	0.018	0.012
18	0.841	0.000	0.000	0.047	0.012	0.012	0.029	0.073	0.047
19	0.909	0.000	0.000	0.022	0.008	0.016	0.032	0.034	0.022
20	0.534	0.000	0.000	0.635	0.001	0.010	0.019	0.022	0.635
23	0.840	0.000	0.000	1.000	0.002	0.016	0.029	0.034	0.040
24	0.840	0.000	0.000	1.000	0.002	0.016	0.029	0.034	1.000
25	0.840	0.000	0.000	1.000	0.002	0.016	0.029	0.034	0.022
30	0.631	0.000	0.000	0.011	0.922	0.007	0.022	0.017	0.011
33	0.684	0.000	0.000	0.012	1.000	0.007	0.024	0.018	0.012
34	0.684	0.000	0.000	0.012	1.000	0.007	0.024	0.018	0.012
35	0.684	0.000	0.000	0.012	1.000	0.007	0.024	0.018	0.012
36	0.684	0.000	0.000	0.012	1.000	0.007	0.024	0.018	0.012
37	0.684	0.000	0.000	0.012	1.000	0.007	0.024	0.018	0.012
40	0.921	0.000	0.000	0.009	0.001	0.003	0.032	0.014	0.009
50	0.145	0.000	0.000	0.008	0.002	0.173	0.005	0.013	0.008
53	0.841	0.000	0.000	0.047	0.012	1.000	0.029	0.073	0.047
54	0.841	0.000	0.000	0.047	0.012	1.000	0.029	0.073	0.047
55	0.841	0.000	0.000	0.047	0.012	1.000	0.029	0.073	0.047
56	0.841	0.000	0.000	0.047	0.012	1.000	0.029	0.073	0.047
57	0.841	0.000	0.000	0.047	0.012	1.000	0.029	0.073	0.047
77	1.000	0.000	0.000	0.001	0.000	0.001	0.035	0.001	0.001
91	0.909	0.000	0.000	0.022	0.008	0.016	1.000	0.034	0.022

TABLE D-141 (CONT'D)

	24	25	30	33	34	35	36	37	40
1	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
2	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
3	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
4	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
5	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
6	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
7	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
13	0.000	0.018	0.008	0.007	0.007	0.001	0.001	0.007	0.023
16	0.000	0.022	0.002	0.002	0.002	0.000	0.000	0.002	0.008
17	0.000	0.012	0.019	0.018	0.018	0.001	0.001	0.018	0.003
18	0.001	0.047	0.013	0.012	0.012	0.001	0.001	0.012	0.016
19	0.000	0.022	0.009	0.008	0.008	0.001	0.001	0.008	0.000
20	0.012	0.635	0.001	0.001	0.001	0.000	0.000	0.001	0.005
23	0.019	1.000	0.002	0.002	0.002	0.000	0.000	0.002	0.008
24	0.019	1.000	0.002	0.002	0.002	0.000	0.000	0.002	0.008
25	0.000	0.022	0.002	0.002	0.002	0.000	0.000	0.002	0.008
30	0.000	0.011	0.018	0.922	0.922	0.067	0.067	0.922	0.003
33	0.000	0.012	0.019	0.018	1.000	0.073	0.073	1.000	0.003
34	0.000	0.012	0.019	0.018	0.088	0.073	0.073	1.000	0.003
35	0.000	0.012	0.019	0.018	1.000	0.073	1.000	1.000	0.003
36	0.000	0.012	0.019	0.018	1.000	0.073	0.073	1.000	0.003
37	0.000	0.012	0.019	0.018	0.018	0.001	0.001	0.018	0.003
40	0.000	0.009	0.001	0.001	0.001	0.000	0.000	0.001	0.000
50	0.000	0.008	0.002	0.002	0.002	0.000	0.000	0.002	0.003
53	0.001	0.047	0.013	0.012	0.012	0.001	0.001	0.012	0.016
54	0.001	0.047	0.013	0.012	0.012	0.001	0.001	0.012	0.016
55	0.001	0.047	0.013	0.012	0.012	0.001	0.001	0.012	0.016
56	0.001	0.047	0.013	0.012	0.012	0.001	0.001	0.012	0.016
57	0.001	0.047	0.013	0.012	0.012	0.001	0.001	0.012	0.016
77	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.022	0.009	0.008	0.008	0.001	0.001	0.008	0.000

TABLE D-141 (CONT'D)

	50	53	54	55	56	57	77	91
1	0.009	0.002	0.002	0.000	0.000	0.002	0.092	0.034
2	0.010	0.002	0.002	0.000	0.000	0.002	0.092	0.034
3	0.010	0.002	0.002	0.000	0.000	0.002	0.092	0.034
4	0.010	0.002	0.002	0.000	0.000	0.002	0.092	0.034
5	0.010	0.002	0.002	0.000	0.000	0.002	0.092	0.034
6	0.010	0.002	0.002	0.000	0.000	0.002	0.092	0.034
7	0.003	0.001	0.001	0.000	0.000	0.001	0.031	0.035
8	0.003	0.001	0.001	0.000	0.000	0.001	0.031	0.035
9	0.003	0.001	0.001	0.000	0.000	0.001	0.031	0.035
10	0.003	0.001	0.001	0.000	0.000	0.001	0.030	0.034
12	0.010	0.002	0.002	0.000	0.000	0.002	0.092	0.034
13	0.010	0.002	0.002	0.000	0.000	0.002	0.092	0.034
16	0.093	0.016	0.016	0.001	0.001	0.016	0.075	0.029
17	0.041	0.007	0.007	0.001	0.001	0.007	0.219	0.024
18	0.070	0.012	0.012	0.001	0.001	0.012	0.143	0.029
19	0.090	0.016	0.016	0.001	0.001	0.016	0.880	0.032
20	0.059	0.010	0.010	0.001	0.001	0.010	0.048	0.019
23	0.093	0.016	0.016	0.001	0.001	0.016	0.075	0.029
24	0.093	0.016	0.016	0.001	0.001	0.016	0.075	0.029
25	0.093	0.016	0.016	0.001	0.001	0.016	0.075	0.029
30	0.038	0.007	0.007	0.000	0.000	0.007	0.202	0.022
33	0.041	0.007	0.007	0.001	0.001	0.007	0.219	0.024
34	0.041	0.007	0.007	0.001	0.001	0.007	0.219	0.024
35	0.041	0.007	0.007	0.001	0.001	0.007	0.219	0.024
36	0.041	0.007	0.007	0.001	0.001	0.007	0.219	0.024
37	0.041	0.007	0.007	0.001	0.001	0.007	0.219	0.024
40	0.018	0.003	0.003	0.000	0.000	0.003	0.085	0.032
50	0.012	0.173	0.173	0.013	0.013	0.173	0.025	0.005
53	0.070	0.012	1.000	0.074	0.074	1.000	0.143	0.029
54	0.070	0.012	0.085	0.074	0.074	1.000	0.143	0.029
55	0.070	0.012	1.000	0.074	1.000	1.000	0.143	0.029
56	0.070	0.012	1.000	0.074	0.074	1.000	0.143	0.029
57	0.070	0.012	0.012	0.001	0.001	0.012	0.143	0.029
77	0.003	0.001	0.001	0.000	0.000	0.001	0.031	0.035
91	0.090	0.016	0.016	0.001	0.001	0.016	0.880	0.032

TABLE D-142  
MMS MATRIX (B) OF ABSORPTION PROBABILITIES

	11	21	22	31	32	51	52
1	0.966	0.010	0.001	0.000	0.000	0.007	0.001
2	0.967	0.010	0.001	0.000	0.000	0.007	0.001
3	0.967	0.010	0.001	0.000	0.000	0.007	0.001
4	0.967	0.010	0.001	0.000	0.000	0.007	0.001
5	0.967	0.010	0.001	0.000	0.000	0.007	0.001
6	0.967	0.010	0.001	0.000	0.000	0.007	0.001
7	0.997	0.000	0.000	0.000	0.000	0.002	0.000
8	0.997	0.000	0.000	0.000	0.000	0.002	0.000
9	0.997	0.000	0.000	0.000	0.000	0.002	0.000
10	0.997	0.000	0.000	0.000	0.000	0.002	0.000
12	0.967	0.010	0.001	0.000	0.000	0.007	0.001
13	0.967	0.010	0.001	0.000	0.000	0.007	0.001
16	0.837	0.012	0.001	0.000	0.000	0.072	0.006
17	0.682	0.006	0.000	0.001	0.001	0.032	0.003
18	0.838	0.026	0.002	0.001	0.000	0.055	0.004
19	0.907	0.012	0.001	0.000	0.000	0.070	0.006
20	0.532	0.352	0.021	0.000	0.000	0.046	0.004
23	0.837	0.012	0.001	0.000	0.000	0.072	0.006
24	0.837	0.012	0.001	0.000	0.000	0.072	0.006
25	0.837	0.012	0.001	0.000	0.000	0.072	0.006
30	0.629	0.006	0.000	0.052	0.027	0.029	0.002
33	0.682	0.006	0.000	0.001	0.001	0.032	0.003
34	0.682	0.006	0.000	0.001	0.001	0.032	0.003
35	0.682	0.006	0.000	0.001	0.001	0.032	0.003
36	0.682	0.006	0.000	0.001	0.001	0.032	0.003
37	0.682	0.006	0.000	0.001	0.001	0.032	0.003
40	0.918	0.005	0.000	0.000	0.000	0.014	0.001
50	0.145	0.004	0.000	0.000	0.000	0.774	0.063
53	0.838	0.026	0.002	0.001	0.000	0.055	0.004
54	0.838	0.026	0.002	0.001	0.000	0.055	0.004
55	0.838	0.026	0.002	0.001	0.000	0.055	0.004
56	0.838	0.026	0.002	0.001	0.000	0.055	0.004
57	0.838	0.026	0.002	0.001	0.000	0.055	0.004
77	0.997	0.000	0.000	0.000	0.000	0.002	0.000
91	0.907	0.012	0.001	0.000	0.000	0.070	0.006

TABLE D-142 (CONT'D)

	60	70	80	81	83	99
1	0.003	0.008	0.000	0.002	0.000	0.001
2	0.003	0.008	0.000	0.002	0.000	0.000
3	0.003	0.008	0.000	0.002	0.000	0.000
4	0.003	0.008	0.000	0.002	0.000	0.000
5	0.003	0.008	0.000	0.002	0.000	0.000
6	0.003	0.008	0.000	0.002	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000
12	0.003	0.008	0.000	0.002	0.000	0.000
13	0.003	0.008	0.000	0.002	0.000	0.000
16	0.003	0.057	0.000	0.011	0.000	0.000
17	0.014	0.005	0.000	0.256	0.000	0.000
18	0.009	0.038	0.000	0.027	0.000	0.000
19	0.000	0.002	0.000	0.003	0.000	0.000
20	0.002	0.036	0.000	0.007	0.000	0.000
23	0.003	0.057	0.000	0.011	0.000	0.000
24	0.003	0.057	0.000	0.011	0.000	0.000
25	0.003	0.057	0.000	0.011	0.000	0.000
30	0.013	0.004	0.000	0.236	0.000	0.000
33	0.014	0.005	0.000	0.256	0.000	0.000
34	0.014	0.005	0.000	0.256	0.000	0.000
35	0.014	0.005	0.000	0.256	0.000	0.000
36	0.014	0.005	0.000	0.256	0.000	0.000
37	0.014	0.005	0.000	0.256	0.000	0.000
40	0.046	0.001	0.005	0.002	0.008	0.000
50	0.002	0.007	0.000	0.005	0.000	0.000
53	0.009	0.038	0.000	0.027	0.000	0.000
54	0.009	0.038	0.000	0.027	0.000	0.000
55	0.009	0.038	0.000	0.027	0.000	0.000
56	0.009	0.038	0.000	0.027	0.000	0.000
57	0.009	0.038	0.000	0.027	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.002	0.000	0.003	0.000	0.000

TABLE D-143  
MMS VECTOR (T) OF TIMES FOR TRANSITION  
FROM ONE STATE TO THE NEXT

1	16.107
2	1.847
3	0.842
4	1.833
5	0.000
6	0.352
7	0.862
8	1.778
9	0.000
10	0.000
12	2.274
13	0.000
16	1.423
17	1.563
18	1.590
19	0.660
20	1.397
23	1.867
24	2.485
25	0.000
30	5.610
33	1.010
34	1.877
35	2.259
36	0.000
37	0.000
40	10.258
50	10.185
53	1.013
54	1.770
55	1.528
56	0.000
57	0.000
77	0.888
91	0.725

TABLE D-144

MMS MATRIX (M) OF EXPECTED NUMBER OF PASSAGES  
THROUGH TRANSIENT STATES, GIVEN AN ABSORPTION  
AT THE CENTRAL MASTER RECORD (STATE M-11)

	1	2	3	4	5	6	7	8	9
1	1.000	1.000	1.000	1.008	1.000	1.000	0.935	1.033	1.033
2	0.000	1.000	1.000	1.008	1.000	1.000	0.935	1.033	1.033
3	0.000	0.000	1.000	1.008	1.000	1.000	0.935	1.033	1.033
4	0.000	0.000	0.000	1.008	1.000	1.000	0.935	1.033	1.033
5	0.000	0.000	0.000	0.000	1.000	1.000	0.935	1.033	1.033
6	0.000	0.000	0.000	0.000	0.000	1.000	0.935	1.033	1.033
7	0.000	0.000	0.000	0.000	0.000	0.000	1.001	1.033	1.033
8	0.000	0.000	0.000	0.000	0.000	0.000	0.001	1.033	1.033
9	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.033	1.033
10	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.032	0.032
12	0.000	0.000	0.000	1.008	1.000	1.000	0.935	1.033	1.033
13	0.000	0.000	0.000	1.008	1.000	1.000	0.935	1.033	1.033
16	0.000	0.000	0.000	0.000	0.000	0.000	0.941	1.033	1.033
17	0.000	0.000	0.000	0.000	0.000	0.000	0.703	1.033	1.033
18	0.000	0.000	0.000	0.000	0.000	0.000	0.857	1.033	1.033
19	0.000	0.000	0.000	0.000	0.000	0.000	0.034	1.033	1.033
20	0.000	0.000	0.000	0.000	0.000	0.000	0.941	1.033	1.033
23	0.000	0.000	0.000	0.000	0.000	0.000	0.941	1.033	1.033
24	0.000	0.000	0.000	0.000	0.000	0.000	0.941	1.033	1.033
25	0.000	0.000	0.000	0.000	0.000	0.000	0.941	1.033	1.033
30	0.000	0.000	0.000	0.000	0.000	0.000	0.703	1.033	1.033
33	0.000	0.000	0.000	0.000	0.000	0.000	0.703	1.033	1.033
34	0.000	0.000	0.000	0.000	0.000	0.000	0.703	1.033	1.033
35	0.000	0.000	0.000	0.000	0.000	0.000	0.703	1.033	1.033
36	0.000	0.000	0.000	0.000	0.000	0.000	0.703	1.033	1.033
37	0.000	0.000	0.000	0.000	0.000	0.000	0.703	1.033	1.033
40	0.000	0.000	0.000	0.000	0.000	0.000	0.938	1.033	1.033
50	0.000	0.000	0.000	0.000	0.000	0.000	0.857	1.033	1.033
53	0.000	0.000	0.000	0.000	0.000	0.000	0.857	1.033	1.033
54	0.000	0.000	0.000	0.000	0.000	0.000	0.857	1.033	1.033
55	0.000	0.000	0.000	0.000	0.000	0.000	0.857	1.033	1.033
56	0.000	0.000	0.000	0.000	0.000	0.000	0.857	1.033	1.033
57	0.000	0.000	0.000	0.000	0.000	0.000	0.857	1.033	1.033
77	0.000	0.000	0.000	0.000	0.000	0.000	0.001	1.033	1.033
91	0.000	0.000	0.000	0.000	0.000	0.000	0.034	1.033	1.033

TABLE D-144 (CONT'D)

	10	12	13	16	17	18	19	20	23
1	1.032	0.008	0.008	0.016	0.005	0.001	0.033	0.016	0.017
2	1.032	0.008	0.008	0.016	0.005	0.001	0.033	0.016	0.017
3	1.032	0.008	0.008	0.016	0.005	0.001	0.033	0.016	0.017
4	1.032	0.008	0.008	0.016	0.005	0.001	0.033	0.016	0.017
5	1.032	0.000	0.000	0.016	0.005	0.001	0.033	0.016	0.017
6	1.032	0.000	0.000	0.016	0.005	0.001	0.033	0.016	0.017
7	1.032	0.000	0.000	0.001	0.000	0.000	0.033	0.001	0.001
8	1.032	0.000	0.000	0.001	0.000	0.000	0.033	0.001	0.001
9	1.032	0.000	0.000	0.001	0.000	0.000	0.033	0.001	0.001
10	1.032	0.000	0.000	0.001	0.000	0.000	0.032	0.001	0.001
12	1.032	1.008	1.008	0.016	0.005	0.001	0.033	0.016	0.017
13	1.032	0.008	1.008	0.016	0.005	0.001	0.033	0.016	0.017
16	1.032	0.000	0.000	1.022	0.001	0.016	0.033	0.022	0.023
17	1.032	0.000	0.000	0.014	1.018	0.009	0.033	0.014	0.015
18	1.032	0.000	0.000	0.048	0.010	1.012	0.033	0.048	0.049
19	1.032	0.000	0.000	0.021	0.006	0.015	1.033	0.021	0.021
20	1.032	0.000	0.000	1.022	0.001	0.016	0.033	1.022	1.041
23	1.032	0.000	0.000	1.022	0.001	0.016	0.033	0.022	1.041
24	1.032	0.000	0.000	1.022	0.001	0.016	0.033	0.022	1.041
25	1.032	0.000	0.000	1.022	0.001	0.016	0.033	0.022	0.023
30	1.032	0.000	0.000	0.014	1.018	0.009	0.033	0.014	0.015
33	1.032	0.000	0.000	0.014	1.018	0.009	0.033	0.014	0.015
34	1.032	0.000	0.000	0.014	1.018	0.009	0.033	0.014	0.015
35	1.032	0.000	0.000	0.014	1.018	0.009	0.033	0.014	0.015
36	1.032	0.000	0.000	0.014	1.018	0.009	0.033	0.014	0.015
37	1.032	0.000	0.000	0.014	1.018	0.009	0.033	0.014	0.015
40	1.032	0.000	0.000	0.008	0.001	0.003	0.033	0.008	0.008
50	1.032	0.000	0.000	0.048	0.010	1.012	0.033	0.048	0.049
53	1.032	0.000	0.000	0.048	0.010	1.012	0.033	0.048	0.049
54	1.032	0.000	0.000	0.048	0.010	1.012	0.033	0.048	0.049
55	1.032	0.000	0.000	0.048	0.010	1.012	0.033	0.048	0.049
56	1.032	0.000	0.000	0.048	0.010	1.012	0.033	0.048	0.049
57	1.032	0.000	0.000	0.048	0.010	1.012	0.033	0.048	0.049
77	1.032	0.000	0.000	0.001	0.000	0.000	0.033	0.001	0.001
91	1.032	0.000	0.000	0.021	0.006	0.015	1.033	0.021	0.021



TABLE D-144 (CONT'D)

	24	25	30	33	34	35	36	37	40
1	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
2	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
3	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
4	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
5	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
6	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
7	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
13	0.000	0.016	0.005	0.005	0.006	0.000	0.000	0.005	0.022
16	0.000	0.022	0.001	0.001	0.002	0.000	0.000	0.001	0.008
17	0.000	0.014	0.018	0.018	0.019	0.001	0.001	0.018	0.005
18	0.001	0.048	0.010	0.010	0.011	0.001	0.001	0.010	0.018
19	0.000	0.021	0.006	0.006	0.006	0.000	0.000	0.006	0.000
20	0.019	1.022	0.001	0.001	0.002	0.000	0.000	0.001	0.008
23	0.019	1.022	0.001	0.001	0.002	0.000	0.000	0.001	0.008
24	1.019	1.022	0.001	0.001	0.002	0.000	0.000	0.001	0.008
25	0.000	1.022	0.001	0.001	0.002	0.000	0.000	0.001	0.008
30	0.000	0.014	1.018	1.018	1.096	0.078	0.078	1.018	0.005
33	0.000	0.014	0.018	1.018	1.096	0.078	0.078	1.018	0.005
34	0.000	0.014	0.018	0.018	1.096	0.078	0.078	1.018	0.005
35	0.000	0.014	0.018	0.018	1.096	1.078	1.078	1.018	0.005
36	0.000	0.014	0.018	0.018	1.096	0.078	1.078	1.018	0.005
37	0.000	0.014	0.018	0.018	0.019	0.001	0.001	1.018	0.005
40	0.000	0.008	0.001	0.001	0.001	0.000	0.000	0.001	1.000
50	0.001	0.048	0.010	0.010	0.011	0.001	0.001	0.010	0.018
53	0.001	0.048	0.010	0.010	0.011	0.001	0.001	0.010	0.018
54	0.001	0.048	0.010	0.010	0.011	0.001	0.001	0.010	0.018
55	0.001	0.048	0.010	0.010	0.011	0.001	0.001	0.010	0.018
56	0.001	0.048	0.010	0.010	0.011	0.001	0.001	0.010	0.018
57	0.001	0.048	0.010	0.010	0.011	0.001	0.001	0.010	0.018
77	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.021	0.006	0.006	0.006	0.000	0.000	0.006	0.000

TABLE D-144 (CONT'D)

	50	53	54	55	56	57	77	91
1	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
2	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
3	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
4	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
5	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
6	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
7	0.000	0.000	0.000	0.000	0.000	0.000	0.032	0.033
8	0.000	0.000	0.000	0.000	0.000	0.000	0.032	0.033
9	0.000	0.000	0.000	0.000	0.000	0.000	0.032	0.033
10	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.032
12	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
13	0.001	0.001	0.002	0.000	0.000	0.001	0.098	0.033
16	0.016	0.016	0.018	0.001	0.001	0.016	0.092	0.033
17	0.009	0.009	0.010	0.001	0.001	0.009	0.330	0.033
18	0.012	0.012	0.013	0.001	0.001	0.012	0.176	0.033
19	0.015	0.015	0.016	0.001	0.001	0.015	0.999	0.033
20	0.016	0.016	0.018	0.001	0.001	0.016	0.092	0.033
23	0.016	0.016	0.018	0.001	0.001	0.016	0.092	0.033
24	0.016	0.016	0.018	0.001	0.001	0.016	0.092	0.033
25	0.016	0.016	0.018	0.001	0.001	0.016	0.092	0.033
30	0.009	0.009	0.010	0.001	0.001	0.009	0.330	0.033
33	0.009	0.009	0.010	0.001	0.001	0.009	0.330	0.033
34	0.009	0.009	0.010	0.001	0.001	0.009	0.330	0.033
35	0.009	0.009	0.010	0.001	0.001	0.009	0.330	0.033
36	0.009	0.009	0.010	0.001	0.001	0.009	0.330	0.033
37	0.009	0.009	0.010	0.001	0.001	0.009	0.330	0.033
40	0.003	0.003	0.003	0.000	0.000	0.003	0.095	0.033
50	1.012	1.012	1.092	0.080	0.080	1.012	0.176	0.033
53	0.012	1.012	1.092	0.080	0.080	1.012	0.176	0.033
54	0.012	0.012	1.092	0.080	0.080	1.012	0.176	0.033
55	0.012	0.012	1.092	1.080	1.080	1.012	0.176	0.033
56	0.012	0.012	1.092	0.080	1.080	1.012	0.176	0.033
57	0.012	0.012	0.013	0.001	0.001	1.012	0.176	0.033
77	0.000	0.000	0.000	0.000	0.000	0.000	1.032	0.033
91	0.015	0.015	0.016	0.001	0.001	0.015	0.999	1.033

TABLE D-145

MMS VECTOR (S) OF TIME BETWEEN ARRIVAL AT ONE STATE  
AND ABSORPTION AT THE CENTRAL MASTER RECORD (STATE M-11)

1	24.169
2	8.062
3	6.216
4	5.373
5	3.507
6	3.507
7	2.785
8	1.923
9	0.145
10	0.141
12	7.647
13	5.373
16	4.646
17	4.776
18	5.058
19	3.838
20	7.991
23	6.594
24	9.080
25	4.646
30	13.592
33	7.982
34	6.972
35	9.231
36	6.972
37	4.776
40	13.125
50	18.287
53	8.102
54	7.089
55	8.617
56	7.089
57	5.058
77	2.811
91	4.563

TABLE D-146  
JUMPS MATRIX (Q) OF CONDITIONAL PROBABILITIES  
FOR TRANSITIONS TO TRANSIENT STATES

	1	10	12	14	16	18	19	20	21
1	0.000	0.570	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.997	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.962	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.961	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.746	0.254	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-146 (CONT'D)

	23	24	26	27	29	30	32	33	34
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
21	0.933	0.067	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.901	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.255	0.000	0.000	0.745
30	0.000	0.000	0.000	0.000	0.000	0.000	0.982	0.018	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-146 (CONT'D)

[illegible]

TABLE D-146 (CONT'D)

	58	59	60	62	64	65	67	68
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.757	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
58	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.885	0.067	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.629	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.520
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-146 (CONT'D)

	70	71	72	73	74	75	76	88
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.480
68	0.922	0.078	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.985
73	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.077	0.923	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.026	0.000	0.000	0.000	0.000



TABLE D-147  
JUMPS MATRIX (R) OF CONDITIONAL PROBABILITIES  
FOR TRANSITIONS TO ABSORBING STATES

	11	13	15	17	22	25
1	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.003	0.000	0.000	0.000	0.000
14	0.000	0.000	0.038	0.000	0.000	0.000
16	0.000	0.000	0.000	0.039	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.099
26	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-147 (CONT'D)

	51	53	55	61	63	99
1	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.966
35	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000
50	0.001	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.048	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.371	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.974

TABLE D-148  
JUMPS MATRIX (N) OF EXPECTED NUMBER  
OF PASSAGES THROUGH TRANSIENT STATES

	1	10	12	14	16	18	19	20	21
1	1.000	0.570	0.570	0.568	0.547	0.552	0.411	0.140	0.411
10	0.000	1.000	1.000	0.997	0.959	0.968	0.722	0.246	0.722
12	0.000	0.000	1.000	0.997	0.959	0.968	0.722	0.246	0.722
14	0.000	0.000	0.000	1.000	0.962	0.971	0.724	0.247	0.724
16	0.000	0.000	0.000	0.000	1.000	1.009	0.753	0.256	0.753
18	0.000	0.000	0.000	0.000	0.000	1.050	0.783	0.267	0.783
19	0.000	0.000	0.000	0.000	0.000	0.066	1.049	0.017	1.049
20	0.000	0.000	0.000	0.000	0.000	0.003	0.002	1.001	0.002
21	0.000	0.000	0.000	0.000	0.000	0.066	0.049	0.017	1.049
23	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
24	0.000	0.000	0.000	0.000	0.000	0.946	0.706	0.240	0.706
26	0.000	0.000	0.000	0.000	0.000	1.050	0.783	0.267	0.783
27	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
29	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
30	0.000	0.000	0.000	0.000	0.000	0.004	0.003	0.001	0.003
32	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001	0.002
33	0.000	0.000	0.000	0.000	0.000	0.069	0.051	0.017	0.051
34	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001	0.002
35	0.000	0.000	0.000	0.000	0.000	0.069	0.051	0.017	0.051
36	0.000	0.000	0.000	0.000	0.000	0.069	0.051	0.017	0.051
37	0.000	0.000	0.000	0.000	0.000	0.946	0.706	0.240	0.706
38	0.000	0.000	0.000	0.000	0.000	0.004	0.003	0.001	0.003
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-148 (CONT'D)

	23	24	26	27	29	30	32	33	34
1	0.384	0.029	0.026	0.524	0.524	0.153	0.151	0.003	0.541
10	0.673	0.051	0.046	0.919	0.919	0.269	0.264	0.005	0.949
12	0.673	0.051	0.046	0.919	0.919	0.269	0.264	0.005	0.949
14	0.675	0.051	0.046	0.922	0.922	0.270	0.265	0.005	0.952
16	0.702	0.053	0.048	0.958	0.958	0.280	0.275	0.005	0.989
18	0.731	0.055	0.050	0.997	0.997	0.292	0.287	0.005	1.030
19	0.979	0.073	0.066	0.996	0.996	0.291	0.286	0.005	1.028
20	0.002	0.003	0.003	1.003	1.003	0.293	0.288	0.005	1.035
21	0.979	0.073	0.066	0.996	0.996	0.291	0.286	0.005	1.028
23	1.002	0.003	0.003	1.003	1.003	0.293	0.288	0.005	1.035
24	0.658	1.050	0.946	0.899	0.899	0.263	0.258	0.005	0.928
26	0.731	0.055	1.050	0.997	0.997	0.292	0.287	0.005	1.030
27	0.002	0.003	0.003	1.003	1.003	0.293	0.288	0.005	1.035
29	0.002	0.003	0.003	0.003	1.003	0.293	0.288	0.005	1.035
30	0.002	0.004	0.004	0.003	0.003	1.051	1.032	0.019	1.035
32	0.002	0.003	0.002	0.002	0.002	0.034	1.033	0.001	1.035
33	0.048	0.076	0.069	0.065	0.065	0.997	0.979	1.018	1.027
34	0.002	0.003	0.002	0.002	0.002	0.034	0.033	0.001	1.035
35	0.048	0.076	0.069	0.065	0.065	0.997	0.979	0.018	1.027
36	0.048	0.076	0.069	0.065	0.065	0.997	0.979	0.018	1.027
37	0.658	1.050	0.946	0.899	0.899	0.263	0.258	0.005	0.928
38	0.002	0.004	0.004	0.003	0.003	1.051	1.032	0.019	1.035
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-148 (CONT'D)

	35	36	37	38	50	52	54	56	57
1	0.018	0.021	0.001	0.020	0.430	0.430	0.430	0.445	0.108
10	0.032	0.037	0.003	0.035	0.000	0.000	0.000	0.000	0.000
12	0.032	0.037	0.003	0.035	0.000	0.000	0.000	0.000	0.000
14	0.032	0.037	0.003	0.035	0.000	0.000	0.000	0.000	0.000
16	0.034	0.039	0.003	0.036	0.000	0.000	0.000	0.000	0.000
18	0.035	0.040	0.003	0.037	0.000	0.000	0.000	0.000	0.000
19	0.035	0.040	0.003	0.037	0.000	0.000	0.000	0.000	0.000
20	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
21	0.035	0.040	0.003	0.037	0.000	0.000	0.000	0.000	0.000
23	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
24	0.032	0.036	0.003	0.034	0.000	0.000	0.000	0.000	0.000
26	0.035	0.040	0.003	0.037	0.000	0.000	0.000	0.000	0.000
27	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
29	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
30	0.035	0.054	0.004	0.050	0.000	0.000	0.000	0.000	0.000
32	0.035	0.036	0.002	0.033	0.000	0.000	0.000	0.000	0.000
33	0.035	1.053	0.073	0.980	0.000	0.000	0.000	0.000	0.000
34	0.035	0.036	0.002	0.033	0.000	0.000	0.000	0.000	0.000
35	1.035	1.053	0.073	0.980	0.000	0.000	0.000	0.000	0.000
36	0.035	1.053	0.073	0.980	0.000	0.000	0.000	0.000	0.000
37	0.032	0.036	1.003	0.034	0.000	0.000	0.000	0.000	0.000
38	0.035	0.054	0.004	1.050	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	1.000	0.999	0.999	1.036	0.252
52	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.037	0.252
54	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.037	0.252
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.037	0.252
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	1.001
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.011
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.011
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.652	0.158
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.037	0.252
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.002
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.014
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.014
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.014
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.652	0.158
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.002
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000

TABLE D-148 (CONT'D)

	58	59	60	62	64	65	67	68
1	0.337	0.337	0.298	0.025	0.016	0.407	0.407	0.242
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.784	0.784	0.694	0.058	0.037	0.946	0.946	0.563
52	0.785	0.785	0.695	0.059	0.037	0.947	0.947	0.563
54	0.785	0.785	0.695	0.059	0.037	0.947	0.947	0.563
56	0.785	0.785	0.695	0.059	0.037	0.947	0.947	0.563
57	0.003	0.003	0.003	0.006	0.004	1.004	1.004	0.597
58	1.036	1.036	0.917	0.075	0.047	0.928	0.928	0.552
59	0.036	1.036	0.917	0.075	0.047	0.928	0.928	0.552
60	0.003	0.003	1.003	0.006	0.004	1.004	1.004	0.597
62	0.494	0.494	0.437	1.037	0.652	0.595	0.595	0.354
64	0.785	0.785	0.695	0.059	1.037	0.947	0.947	0.563
65	0.003	0.003	0.003	0.006	0.004	1.004	1.004	0.597
67	0.003	0.003	0.003	0.006	0.004	0.004	1.004	0.597
68	0.005	0.005	0.004	0.010	0.006	0.006	0.006	1.123
70	0.002	0.002	0.002	0.004	0.002	0.002	0.002	0.043
71	0.043	0.043	0.038	0.089	0.056	0.051	0.051	1.064
72	0.002	0.002	0.002	0.004	0.002	0.002	0.002	0.043
73	0.043	0.043	0.038	0.089	0.056	0.051	0.051	1.064
74	0.043	0.043	0.038	0.089	0.056	0.051	0.051	1.064
75	0.494	0.494	0.437	1.037	0.652	0.595	0.595	0.354
76	0.005	0.005	0.004	0.010	0.006	0.006	0.006	1.123
88	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.028

TABLE D-148 (CONT'D)

	70	71	72	73	74	75	76	88
1	0.223	0.019	0.223	0.014	0.033	0.003	0.030	0.415
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.519	0.044	0.519	0.033	0.077	0.006	0.071	0.965
52	0.519	0.044	0.519	0.033	0.077	0.006	0.071	0.966
54	0.519	0.044	0.519	0.033	0.077	0.006	0.071	0.966
56	0.519	0.044	0.519	0.033	0.077	0.006	0.071	0.966
57	0.551	0.047	0.551	0.035	0.081	0.006	0.075	1.024
58	0.509	0.043	0.509	0.032	0.075	0.006	0.070	0.947
59	0.509	0.043	0.509	0.032	0.075	0.006	0.070	0.947
60	0.551	0.047	0.551	0.035	0.081	0.006	0.075	1.024
62	0.327	0.028	0.327	0.021	0.048	0.004	0.045	0.607
64	0.519	0.044	0.519	0.033	0.077	0.006	0.071	0.966
65	0.551	0.047	0.551	0.035	0.081	0.006	0.075	1.024
67	0.551	0.047	0.551	0.035	0.081	0.006	0.075	1.024
68	1.035	0.088	1.035	0.042	0.130	0.010	0.120	1.023
70	1.040	0.003	1.040	0.042	0.046	0.004	0.042	1.025
71	0.981	1.083	0.981	0.040	1.123	0.087	1.037	0.991
72	0.040	0.003	1.040	0.042	0.046	0.004	0.042	1.025
73	0.981	0.083	0.981	1.040	1.123	0.087	1.037	0.991
74	0.981	0.083	0.981	0.040	1.123	0.087	1.037	0.991
75	0.327	0.028	0.327	0.021	0.048	1.004	0.045	0.607
76	1.035	0.088	1.035	0.042	0.130	0.010	1.120	1.023
88	0.025	0.002	0.025	0.027	0.029	0.002	0.027	1.026

TABLE D-149  
JUMPS MATRIX (H) OF PROBABILITY  
OF PASSAGE THROUGH A TRANSIENT STATE

	1	10	12	14	16	18	19	20	21
1	0.000	0.570	0.570	0.568	0.547	0.525	0.392	0.140	0.392
10	0.000	0.000	1.000	0.997	0.959	0.922	0.688	0.246	0.688
12	0.000	0.000	0.000	0.997	0.959	0.922	0.688	0.246	0.688
14	0.000	0.000	0.000	0.000	0.962	0.924	0.690	0.246	0.690
16	0.000	0.000	0.000	0.000	0.000	0.961	0.717	0.256	0.717
18	0.000	0.000	0.000	0.000	0.000	0.047	0.746	0.266	0.746
19	0.000	0.000	0.000	0.000	0.000	0.063	0.047	0.017	1.000
20	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
21	0.000	0.000	0.000	0.000	0.000	0.063	0.047	0.017	0.047
23	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
24	0.000	0.000	0.000	0.000	0.000	0.901	0.673	0.240	0.673
26	0.000	0.000	0.000	0.000	0.000	1.000	0.746	0.266	0.746
27	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
29	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
30	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.001	0.003
32	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001	0.002
33	0.000	0.000	0.000	0.000	0.000	0.065	0.049	0.017	0.049
34	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001	0.002
35	0.000	0.000	0.000	0.000	0.000	0.065	0.049	0.017	0.049
36	0.000	0.000	0.000	0.000	0.000	0.065	0.049	0.017	0.049
37	0.000	0.000	0.000	0.000	0.000	0.901	0.673	0.240	0.673
38	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.001	0.003
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



TABLE D-149 (CONT'D)

	23	24	26	27	29	30	32	33	34
1	0.383	0.028	0.025	0.523	0.523	0.146	0.146	0.003	0.523
10	0.672	0.049	0.044	0.917	0.917	0.256	0.256	0.005	0.917
12	0.672	0.049	0.044	0.917	0.917	0.256	0.256	0.005	0.917
14	0.674	0.049	0.044	0.920	0.920	0.257	0.256	0.005	0.920
16	0.701	0.051	0.046	0.956	0.956	0.267	0.266	0.005	0.956
18	0.729	0.053	0.047	0.995	0.995	0.278	0.277	0.005	0.995
19	0.977	0.070	0.063	0.993	0.993	0.277	0.277	0.005	0.993
20	0.002	0.003	0.003	1.000	1.000	0.279	0.279	0.005	1.000
21	0.977	0.070	0.063	0.993	0.993	0.277	0.277	0.005	0.993
23	0.002	0.003	0.003	1.000	1.000	0.279	0.279	0.005	1.000
24	0.657	0.047	0.901	0.896	0.896	0.250	0.250	0.005	0.896
26	0.729	0.053	0.047	0.995	0.995	0.278	0.277	0.005	0.995
27	0.002	0.003	0.003	0.002	1.000	0.279	0.279	0.005	1.000
29	0.002	0.003	0.003	0.002	0.002	0.279	0.279	0.005	1.000
30	0.002	0.004	0.003	0.003	0.003	0.049	0.999	0.019	1.000
32	0.002	0.002	0.002	0.002	0.002	0.032	0.032	0.001	1.000
33	0.048	0.072	0.065	0.065	0.065	0.948	0.947	0.018	0.993
34	0.002	0.002	0.002	0.002	0.002	0.032	0.032	0.001	0.034
35	0.048	0.072	0.065	0.065	0.065	0.948	0.947	0.018	0.993
36	0.048	0.072	0.065	0.065	0.065	0.948	0.947	0.018	0.993
37	0.657	1.000	0.901	0.896	0.896	0.250	0.250	0.005	0.896
38	0.002	0.004	0.003	0.003	0.003	1.000	0.999	0.019	1.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-149 (CONT'D)

	35	36	37	38	50	52	54	56	57
1	0.018	0.020	0.001	0.019	0.430	0.430	0.430	0.430	0.108
10	0.031	0.035	0.003	0.033	0.000	0.000	0.000	0.000	0.000
12	0.031	0.035	0.003	0.033	0.000	0.000	0.000	0.000	0.000
14	0.031	0.035	0.003	0.033	0.000	0.000	0.000	0.000	0.000
16	0.033	0.037	0.003	0.034	0.000	0.000	0.000	0.000	0.000
18	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
19	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
20	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
21	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
23	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
24	0.030	0.034	0.002	0.032	0.000	0.000	0.000	0.000	0.000
26	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
27	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
29	0.034	0.038	0.003	0.036	0.000	0.000	0.000	0.000	0.000
30	0.034	0.051	0.004	0.048	0.000	0.000	0.000	0.000	0.000
32	0.034	0.034	0.002	0.032	0.000	0.000	0.000	0.000	0.000
33	0.034	1.000	0.072	0.933	0.000	0.000	0.000	0.000	0.000
34	0.034	0.034	0.002	0.032	0.000	0.000	0.000	0.000	0.000
35	0.034	1.000	0.072	0.933	0.000	0.000	0.000	0.000	0.000
36	0.034	0.050	0.072	0.933	0.000	0.000	0.000	0.000	0.000
37	0.030	0.034	0.002	0.032	0.000	0.000	0.000	0.000	0.000
38	0.034	0.051	0.004	0.048	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.999	0.999	0.999	0.251
52	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000	0.252
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.252
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035	0.252
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.011
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.011
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.629	0.158
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.252
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.002
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054	0.014
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054	0.014
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054	0.014
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.629	0.158
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.002
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000

TABLE D-149 (CONT'D)

	58	59	60	62	64	65	67	68
1	0.325	0.325	0.298	0.024	0.015	0.405	0.405	0.215
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.757	0.757	0.692	0.056	0.035	0.942	0.942	0.501
52	0.758	0.758	0.693	0.056	0.035	0.943	0.943	0.502
54	0.758	0.758	0.693	0.056	0.035	0.943	0.943	0.502
56	0.758	0.758	0.693	0.056	0.035	0.943	0.943	0.502
57	0.003	0.003	0.003	0.006	0.004	1.000	1.000	0.532
58	0.035	1.000	0.914	0.073	0.046	0.925	0.925	0.492
59	0.035	0.035	0.914	0.073	0.046	0.925	0.925	0.492
60	0.003	0.003	0.003	0.006	0.004	1.000	1.000	0.532
62	0.477	0.477	0.436	0.035	0.629	0.593	0.593	0.315
64	0.758	0.758	0.693	0.056	0.035	0.943	0.943	0.502
65	0.003	0.003	0.003	0.006	0.004	0.004	1.000	0.532
67	0.003	0.003	0.003	0.006	0.004	0.004	0.004	0.532
68	0.005	0.005	0.004	0.010	0.006	0.006	0.006	0.109
70	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.038
71	0.041	0.041	0.038	0.086	0.054	0.051	0.051	0.947
72	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.038
73	0.041	0.041	0.038	0.086	0.054	0.051	0.051	0.947
74	0.041	0.041	0.038	0.086	0.054	0.051	0.051	0.947
75	0.477	0.477	0.436	1.000	0.629	0.593	0.593	0.315
76	0.005	0.005	0.004	0.010	0.006	0.006	0.006	1.000
88	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.025

TABLE D-149 (CONT'D)

	70	71	72	73	74	75	76	88
1	0.214	0.017	0.214	0.014	0.029	0.003	0.027	0.404
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.499	0.041	0.499	0.032	0.068	0.006	0.063	0.941
52	0.499	0.041	0.499	0.032	0.068	0.006	0.063	0.941
54	0.499	0.041	0.499	0.032	0.068	0.006	0.063	0.941
56	0.499	0.041	0.499	0.032	0.068	0.006	0.063	0.941
57	0.529	0.043	0.529	0.034	0.073	0.006	0.067	0.998
58	0.490	0.040	0.490	0.031	0.067	0.006	0.062	0.923
59	0.490	0.040	0.490	0.031	0.067	0.006	0.062	0.923
60	0.529	0.043	0.529	0.034	0.073	0.006	0.067	0.998
62	0.314	0.026	0.314	0.020	0.043	0.004	0.040	0.592
64	0.499	0.041	0.499	0.032	0.068	0.006	0.063	0.941
65	0.529	0.043	0.529	0.034	0.073	0.006	0.067	0.998
67	0.529	0.043	0.529	0.034	0.073	0.006	0.067	0.998
68	0.996	0.081	0.996	0.040	0.115	0.010	0.107	0.997
70	0.038	0.003	1.000	0.041	0.041	0.003	0.038	0.999
71	0.943	0.077	0.943	0.039	1.000	0.086	0.926	0.966
72	0.038	0.003	0.038	0.041	0.041	0.003	0.038	0.999
73	0.943	0.077	0.943	0.039	1.000	0.086	0.926	0.966
74	0.943	0.077	0.943	0.039	0.110	0.086	0.926	0.966
75	0.314	0.026	0.314	0.020	0.043	0.004	0.040	0.592
76	0.996	0.081	0.996	0.040	0.115	0.010	0.107	0.997
88	0.025	0.002	0.025	0.026	0.026	0.002	0.024	0.025

TABLE D-150  
JUMPS MATRIX (B) OF ABSORPTION PROBABILITIES

	11	13	15	17	22	25
1	0.000	0.002	0.022	0.021	0.000	0.003
10	0.000	0.003	0.038	0.037	0.000	0.005
12	0.000	0.003	0.038	0.037	0.000	0.005
14	0.000	0.000	0.038	0.038	0.000	0.005
16	0.000	0.000	0.000	0.039	0.000	0.005
18	0.000	0.000	0.000	0.000	0.000	0.005
19	0.000	0.000	0.000	0.000	0.000	0.007
20	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.007
23	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.104
26	0.000	0.000	0.000	0.000	0.000	0.005
27	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.008
34	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.008
36	0.000	0.000	0.000	0.000	0.000	0.008
37	0.000	0.000	0.000	0.000	0.000	0.104
38	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-150 (CONT'D)

	51	53	55	61	63	99
1	0.000	0.000	0.000	0.016	0.009	0.927
10	0.000	0.000	0.000	0.000	0.000	0.917
12	0.000	0.000	0.000	0.000	0.000	0.917
14	0.000	0.000	0.000	0.000	0.000	0.919
16	0.000	0.000	0.000	0.000	0.000	0.956
18	0.000	0.000	0.000	0.000	0.000	0.995
19	0.000	0.000	0.000	0.000	0.000	0.993
20	0.000	0.000	0.000	0.000	0.000	1.000
21	0.000	0.000	0.000	0.000	0.000	0.993
23	0.000	0.000	0.000	0.000	0.000	1.000
24	0.000	0.000	0.000	0.000	0.000	0.896
26	0.000	0.000	0.000	0.000	0.000	0.995
27	0.000	0.000	0.000	0.000	0.000	1.000
29	0.000	0.000	0.000	0.000	0.000	1.000
30	0.000	0.000	0.000	0.000	0.000	1.000
32	0.000	0.000	0.000	0.000	0.000	1.000
33	0.000	0.000	0.000	0.000	0.000	0.992
34	0.000	0.000	0.000	0.000	0.000	1.000
35	0.000	0.000	0.000	0.000	0.000	0.992
36	0.000	0.000	0.000	0.000	0.000	0.992
37	0.000	0.000	0.000	0.000	0.000	0.896
38	0.000	0.000	0.000	0.000	0.000	1.000
50	0.001	0.000	0.000	0.038	0.022	0.940
52	0.000	0.000	0.000	0.038	0.022	0.941
54	0.000	0.000	0.000	0.038	0.022	0.941
56	0.000	0.000	0.000	0.038	0.022	0.941
57	0.000	0.000	0.000	0.000	0.002	0.997
58	0.000	0.000	0.000	0.050	0.028	0.922
59	0.000	0.000	0.000	0.050	0.028	0.922
60	0.000	0.000	0.000	0.000	0.002	0.997
62	0.000	0.000	0.000	0.024	0.385	0.592
64	0.000	0.000	0.000	0.038	0.022	0.941
65	0.000	0.000	0.000	0.000	0.002	0.997
67	0.000	0.000	0.000	0.000	0.002	0.997
68	0.000	0.000	0.000	0.000	0.004	0.996
70	0.000	0.000	0.000	0.000	0.001	0.999
71	0.000	0.000	0.000	0.002	0.033	0.965
72	0.000	0.000	0.000	0.000	0.001	0.999
73	0.000	0.000	0.000	0.002	0.033	0.965
74	0.000	0.000	0.000	0.002	0.033	0.965
75	0.000	0.000	0.000	0.024	0.385	0.592
76	0.000	0.000	0.000	0.000	0.004	0.996
88	0.000	0.000	0.000	0.000	0.001	0.999

TABLE D-151  
JUMPS VECTOR (T) OF TIMES  
FOR TRANSITION FROM ONE STATE TO THE NEXT

1	0.000
10	22.196
12	9.920
14	2.990
16	3.585
18	0.042
19	0.000
20	0.000
21	0.533
23	5.616
24	1.499
26	7.393
27	4.166
29	1.063
30	0.954
32	0.006
33	0.000
34	0.000
35	0.000
36	0.000
37	0.000
38	0.000
50	0.820
52	2.332
54	6.244
56	0.059
57	0.000
58	0.000
59	1.237
60	2.117
62	7.819
64	5.316
65	2.902
67	0.636
68	0.924
70	0.003
71	0.000
72	0.000
73	0.000
74	0.000
75	0.000
76	0.000
88	0.000

TABLE D-152  
JUMPS MATRIX (M) OF EXPECTED NUMBER  
OF PASSAGES THROUGH TRANSIENT STATES, GIVEN AN ABSORPTION  
AT THE MASTER MILITARY PAY ACCOUNT (STATE J-99)

	1	10	12	14	16	18	19	20	21
1	1.000	0.564	0.564	0.564	0.564	0.592	0.441	0.151	0.441
10	0.000	1.000	1.000	1.000	1.000	1.050	0.782	0.268	0.782
12	0.000	0.000	1.000	1.000	1.000	1.050	0.782	0.268	0.782
14	0.000	0.000	0.000	1.000	1.000	1.050	0.782	0.268	0.782
16	0.000	0.000	0.000	0.000	1.000	1.050	0.782	0.268	0.782
18	0.000	0.000	0.000	0.000	0.000	1.050	0.782	0.268	0.782
19	0.000	0.000	0.000	0.000	0.000	0.066	1.049	0.017	1.049
20	0.000	0.000	0.000	0.000	0.000	0.003	0.002	1.001	0.002
21	0.000	0.000	0.000	0.000	0.000	0.066	0.049	0.017	1.049
23	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
24	0.000	0.000	0.000	0.000	0.000	1.050	0.782	0.268	0.782
26	0.000	0.000	0.000	0.000	0.000	1.050	0.782	0.268	0.782
27	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
29	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.002
30	0.000	0.000	0.000	0.000	0.000	0.004	0.003	0.001	0.003
32	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001	0.002
33	0.000	0.000	0.000	0.000	0.000	0.069	0.051	0.018	0.051
34	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001	0.002
35	0.000	0.000	0.000	0.000	0.000	0.069	0.051	0.018	0.051
36	0.000	0.000	0.000	0.000	0.000	0.069	0.051	0.018	0.051
37	0.000	0.000	0.000	0.000	0.000	1.050	0.782	0.268	0.782
38	0.000	0.000	0.000	0.000	0.000	0.004	0.003	0.001	0.003
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



TABLE D-152 (CONT'D)

	23	24	26	27	29	30	32	33	34
1	0.414	0.028	0.028	0.565	0.565	0.165	0.162	0.003	0.584
10	0.734	0.050	0.050	1.003	1.003	0.293	0.288	0.005	1.035
12	0.734	0.050	0.050	1.003	1.003	0.293	0.288	0.005	1.035
14	0.734	0.050	0.050	1.003	1.003	0.293	0.288	0.005	1.035
16	0.734	0.050	0.050	1.003	1.003	0.293	0.288	0.005	1.035
18	0.734	0.050	0.050	1.003	1.003	0.293	0.288	0.005	1.035
19	0.986	0.066	0.066	1.003	1.003	0.293	0.288	0.005	1.035
20	0.002	0.003	0.003	1.003	1.003	0.293	0.288	0.005	1.035
21	0.986	0.066	0.066	1.003	1.003	0.293	0.288	0.005	1.035
23	1.002	0.003	0.003	1.003	1.003	0.293	0.288	0.005	1.035
24	0.734	1.050	1.050	1.003	1.003	0.293	0.288	0.005	1.035
26	0.734	0.050	1.050	1.003	1.003	0.293	0.288	0.005	1.035
27	0.002	0.003	0.003	1.003	1.003	0.293	0.288	0.005	1.035
29	0.002	0.003	0.003	0.003	1.003	0.293	0.288	0.005	1.035
30	0.002	0.004	0.004	0.003	0.003	1.051	1.032	0.019	1.035
32	0.002	0.002	0.002	0.002	0.002	0.034	1.033	0.001	1.035
33	0.048	0.069	0.069	0.066	0.066	1.004	0.986	1.018	1.035
34	0.002	0.002	0.002	0.002	0.002	0.034	0.033	0.001	1.035
35	0.048	0.069	0.069	0.066	0.066	1.004	0.986	0.018	1.035
36	0.048	0.069	0.069	0.066	0.066	1.004	0.986	0.018	1.035
37	0.734	1.050	1.050	1.003	1.003	0.293	0.288	0.005	1.035
38	0.002	0.004	0.004	0.003	0.003	1.051	1.032	0.019	1.035
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TABLE D-152 (CONT'D)

	35	36	37	38	50	52	54	56	57
1	0.020	0.023	0.001	0.021	0.436	0.436	0.436	0.452	0.117
10	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
12	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
14	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
16	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
18	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
19	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
20	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
21	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
23	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
24	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
26	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
27	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
29	0.035	0.040	0.003	0.038	0.000	0.000	0.000	0.000	0.000
30	0.035	0.054	0.003	0.050	0.000	0.000	0.000	0.000	0.000
32	0.035	0.036	0.002	0.033	0.000	0.000	0.000	0.000	0.000
33	0.035	1.053	0.066	0.987	0.000	0.000	0.000	0.000	0.000
34	0.035	0.036	0.002	0.033	0.000	0.000	0.000	0.000	0.000
35	1.035	1.053	0.066	0.987	0.000	0.000	0.000	0.000	0.000
36	0.035	1.053	0.066	0.987	0.000	0.000	0.000	0.000	0.000
37	0.035	0.040	1.003	0.038	0.000	0.000	0.000	0.000	0.000
38	0.035	0.054	0.003	1.050	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.037	0.267
52	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.037	0.267
54	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.037	0.267
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.037	0.267
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	1.001
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.012
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.012
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.037	0.267
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.037	0.267
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.002
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.014
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.014
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.014
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.037	0.267
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.002
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000

TABLE D-152 (CONT'D)

	58	59	60	62	64	65	67	68
1	0.336	0.336	0.321	0.016	0.016	0.438	0.438	0.260
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.770	0.770	0.737	0.037	0.037	1.004	1.004	0.596
52	0.770	0.770	0.737	0.037	0.037	1.004	1.004	0.596
54	0.770	0.770	0.737	0.037	0.037	1.004	1.004	0.596
56	0.770	0.770	0.737	0.037	0.037	1.004	1.004	0.596
57	0.003	0.003	0.003	0.004	0.004	1.004	1.004	0.596
58	1.036	1.036	0.991	0.048	0.048	1.004	1.004	0.596
59	0.036	1.036	0.991	0.048	0.048	1.004	1.004	0.596
60	0.003	0.003	1.003	0.004	0.004	1.004	1.004	0.596
62	0.770	0.770	0.737	1.037	1.037	1.004	1.004	0.596
64	0.770	0.770	0.737	0.037	1.037	1.004	1.004	0.596
65	0.003	0.003	0.003	0.004	0.004	1.004	1.004	0.596
67	0.003	0.003	0.003	0.004	0.004	0.004	1.004	0.596
68	0.005	0.005	0.004	0.006	0.006	0.006	0.006	1.123
70	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.043
71	0.041	0.041	0.039	0.055	0.055	0.053	0.053	1.098
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.043
73	0.041	0.041	0.039	0.055	0.055	0.053	0.053	1.098
74	0.041	0.041	0.039	0.055	0.055	0.053	0.053	1.098
75	0.770	0.770	0.737	1.037	1.037	1.004	1.004	0.596
76	0.005	0.005	0.004	0.006	0.006	0.006	0.006	1.123
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.028

TABLE D-152 (CONT'D)

	70	71	72	73	74	75	76	88
1	0.240	0.020	0.240	0.015	0.034	0.002	0.033	0.447
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
52	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
54	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
56	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
57	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
58	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
59	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
60	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
62	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
64	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
65	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
67	0.551	0.045	0.551	0.034	0.079	0.004	0.075	1.026
68	1.038	0.085	1.038	0.041	0.126	0.006	0.120	1.026
70	1.040	0.003	1.040	0.041	0.044	0.002	0.042	1.026
71	1.015	1.083	1.015	0.040	1.123	0.053	1.070	1.026
72	0.040	0.003	1.040	0.041	0.044	0.002	0.042	1.026
73	1.015	0.083	1.015	1.040	1.123	0.053	1.070	1.026
74	1.015	0.083	1.015	0.040	1.123	0.053	1.070	1.026
75	0.551	0.045	0.551	0.034	0.079	1.004	0.075	1.026
76	1.038	0.085	1.038	0.041	0.126	0.006	1.120	1.026
88	0.025	0.002	0.025	0.026	0.028	0.001	0.027	1.026

TABLE D-153

JUMPS VECTOR (S) OF TIME BETWEEN ARRIVAL AT ONE STATE AND  
ABSORPTION AT THE MASTER MILITARY PAY ACCOUNT (STATE J-99)

1	34.988
10	49.243
12	27.047
14	17.127
16	14.137
18	10.552
19	12.207
20	5.558
21	12.207
23	11.174
24	19.444
26	17.945
27	5.558
29	1.392
30	1.073
32	0.081
33	2.217
34	0.075
35	2.217
36	2.217
37	19.444
38	1.073
50	16.556
52	15.736
54	13.404
56	7.160
57	4.164
58	8.120
59	8.120
60	6.281
62	20.295
64	12.476
65	4.164
67	1.262
68	1.157
70	0.084
71	2.061
72	0.081
73	2.061
74	2.061
75	20.295
76	1.157
88	0.052

ANNEX D-6

PERCENTILE VALUES OF THE STUDENT'S  $t$ -DISTRIBUTION

TABLE D-154  
PERCENTILE VALUES OF THE STUDENTS T-DISTRIBUTION

N	Confidence level (1 - $\alpha$ )			
	One-sided limit Two-sided interval	.90 .80	.95 .90	.975 .95
1		3.08	6.31	12.71
2		1.89	2.92	4.30
3		1.64	2.35	3.18
4		1.53	2.13	2.78
5		1.48	2.02	2.57
6		1.44	1.94	2.45
7		1.42	1.90	2.36
8		1.40	1.86	2.31
9		1.38	1.83	2.26
10		1.37	1.81	2.23
11		1.36	1.80	2.20
12		1.36	1.78	2.18
13		1.35	1.77	2.16
14		1.34	1.76	2.14
15		1.34	1.75	2.13
16		1.34	1.75	2.12
17		1.33	1.74	2.11
18		1.33	1.73	2.10
19		1.33	1.73	2.09
20		1.32	1.72	2.09
21		1.32	1.72	2.08
22		1.32	1.72	2.07
23		1.32	1.71	2.07
24		1.32	1.71	2.06
25		1.32	1.71	2.06
26		1.32	1.71	2.06
27		1.31	1.70	2.05
28		1.32	1.70	2.05
29		1.32	1.70	2.04
30		1.32	1.70	2.04
40		1.30	1.68	2.02
60		1.30	1.67	2.00
120		1.29	1.66	1.98
$\infty$		1.28	1.645	1.96

APPENDIX E  
METHODOLOGY



## APPENDIX E

### METHODOLOGY

#### INFORMATION FLOW MODEL

The two principal elements of the JUMPS/MMS system are the individual Marine and his master record at Kansas City. The system itself is essentially a means of communication between these two elements. Information flows both ways through a network of computers, automated processors, and telecommunications links. Most JUMPS/MMS transactions originate with an action by an individual --an action such as marriage, promotion, or the starting of a savings bond. The processing of information related to these actions starts when the event is reported at the appropriate point and ends when the master files at Kansas City are updated to reflect occurrence of the event. The master files are the Central Master Record (CMR) for personnel-related (MMS) information and the Master Military Pay Account (MMPA) for pay-unique (JUMPS) information.

The processing of information through the JUMPS/MMS system can be represented as data elements flowing through a network of nodes (processing points) and along routes between nodes. The major objective of this analysis is to estimate the mean probabilities and times associated with the transition of information between specific nodes. In figure E-1, for example,  $p_{ij}$  is the probability that a given data element flowing from node  $i$  will go to node  $j$  vice any alternative node. The mean time for the transition from node  $i$  to any node immediately following node  $i$  in the network is given by  $t_i$ .

The first major task of this analysis, then, was to develop an information flow model that included all possible processing steps and outcomes for both MMS and JUMPS. A highly simplified version of the JUMPS/MMS information flow network was illustrated in figure 1. Detailed network diagrams are contained in appendix B.

#### ESTIMATING CONDITIONAL TRANSITION PROBABILITIES

The distribution of data flowing from any JUMPS/MMS node is assumed to be multinomial. Thus, if there are  $k$  nodes to which data may flow from node  $i$ , the probability distribution

function (p.d.f.) of the transitions from node  $i$  is given by:

$$p(n_{i1}, n_{i2}, \dots, n_{ik}) = \frac{n_{i1}! n_{i2}! \dots n_{ik}!}{n_i!} p_{i1}^{n_{i1}} p_{i2}^{n_{i2}} \dots p_{ik}^{n_{ik}}$$

where  $n_{ij}$  = number of transitions from node  $i$  to node  $j$ ,  
and  $n_i$  = total number of transactions from node  $i$  (sample size)

$$= \sum_{j=1}^k n_{ij} .$$

The set of values  $(n_{i1}, n_{i2}, \dots, n_{ik})$  represents all of the  $k$  possible outcomes of a transaction at node  $i$ .

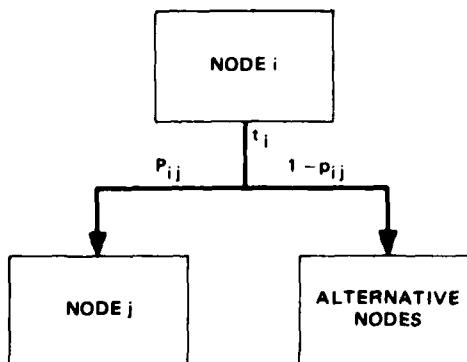


FIG. E-1: DATA FLOW MODEL

For large samples (i.e., for  $n > 30$ ),  $P_{ij}$  is approximately normally distributed (the approximation improves with increasing  $n$ ) with mean ( $\mu$ ) and variance ( $\sigma^2$ ) given by:

$$\mu = P_{ij} \text{ and } \sigma^2 = \frac{1}{n} P_{ij} (1 - P_{ij}).$$

The maximum likelihood estimator for  $p_{ij}$  is given by:

$$\hat{p}_{ij} = \frac{n_{ij}}{n_i}$$

and the variance of this estimate is:

$$s^2 = \frac{1}{n_i} \hat{p}_{ij} (1 - \hat{p}_{ij}).$$

Suppressing the subscripts of  $P$ , we can now define a two-sided, 100  $(1 - \alpha)$  percent confidence interval for  $P$ :

$$P (\hat{P} - \phi s < P < \hat{P} + \phi s) = 1 - \alpha$$

where  $\phi$  is the 100  $(1 - \alpha/2)^{\text{th}}$  percentile value of the student's  $t$ -distribution for  $(n_i - 1)$  degrees of freedom.<sup>1</sup> Representative values of this distribution are given in appendix C. Such a confidence interval may be interpreted as saying that we may be 100  $(1 - \alpha)$  percent certain that the "true" value of the parameter  $p$  (transition probability) lies between  $(\hat{P} - \phi s)$  and  $(\hat{P} + \phi s)$ .

Similarly, the upper and lower one-sided 100  $(1 - \alpha)$  percent confidence limits are given by:

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The customary notation for values of the  $t$ -distribution is " $t$ ", but  $\phi$  will be used to avoid confusion with later notation for transition time.

$$\text{Lower: } P (P > \hat{P} - \phi s) = 1 - \alpha$$

and

$$\text{Upper: } P (P < \hat{P} + \phi s) = 1 - \alpha$$

where  $\phi$  is now the 100  $(1 - \alpha)$ <sup>th</sup> percentile value of the students t-distribution for  $(n_i - 1)$  degrees of freedom.

As a matter of procedure we will use two-sided, 95 percent confidence intervals wherever possible. This will facilitate comparisons among units. If, however, the two-sided interval contains either a negative time or a proportion outside the range  $0 < p < 1$ , a one-sided interval will be used.

The expected time required for information to make the transition from node  $i$  to any subsequent node is estimated using the maximum likelihood estimator:

$$\hat{t}_i = \frac{1}{n} \sum_{k=1}^n t_{ik}$$

where  $t_{ik}$  is the  $k^{\text{th}}$  observation of transition time from node  $i$  out of a total of  $n$  transitions. The variance of this estimate is given by:

$$s^2 = \frac{1}{n-1} \sum_{k=1}^n (t_{ik} - \hat{t}_i)^2 .$$

An unbiased estimate of the population variance is then:

$$\hat{\sigma}^2 = s^2 \left( \frac{1}{n-1} \right) .$$

We know from the central limit theorem that the  $\hat{t}_i$  are normally distributed around the "true" value of the population mean,  $t_i$  (see, for example, reference E-2). We can, therefore, construct a two-sided 100  $(1 - \alpha)$  percent confidence interval for  $t_i$ :

$$P \left( \hat{t}_i - \frac{\phi s}{\sqrt{n-1}} < t_i < \hat{t}_i + \frac{\phi s}{\sqrt{n-1}} \right) = 1 - \alpha$$

where  $\phi$  is again the 100  $(1 - \alpha/2)^{th}$  percentile value of the students t-distribution for  $(n-1)$  degrees of freedom.

#### ESTIMATING OVERALL SYSTEM PERFORMANCE

The transition probabilities and times developed above are conditional--that is, they describe the result of processing at node  $i$  given that the data element actually reaches node  $i$ . The overall JUMPS/MMS processing network contains many loops and potential loss points. The conditional parameters, therefore, do not completely describe the performance of the system. Since the outcome of processing at each node in the system is a random variable, the overall system can be viewed as a sequence of random variables. Further, the outcome of each processing step depends only on the result of the preceeding step. (A step corresponds to the processing of a data element through a processing node). Thus, the outcome of the  $N^{th}$  step is uniquely determined by the outcome of the  $(N-1)^{st}$  step. Any such process is called a Markov process and the system can be modeled as a finite absorbing Markov Chain (see reference E-3).

A Markov model can be developed for each basic sampling unit<sup>1</sup> in the data base. Using such a model we can estimate the probabilities and times associated with the transition of information between any two processing points in the system--the first and last, for example--rather than simply between successive points, as in the conditional model above. In short, the Markov model provides an estimate of overall system performance.

The use of a Markov model to represent the flow of data was originally developed in a 1972 CNA study of MMS (reference E-4). The model was expanded to include the JUMPS data flow in the 1975 CNA study of JUMPS/MMS (reference E-5). In commenting on that study, the Fiscal Director of the Marine Corps (the study sponsor) stated (see appendix A) that "...the functional managers of both JUMPS and MMS agree that the methodology used in the model is valid. For that reason, we are prompted to consider the

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The basic sampling unit is the lowest command echelon for which data is collected.

feasibility of extending the anticipated benefits of the on-going (1975) study beyond those originally contemplated. Specifically, what is desired is continued use of the model for subsequent reviews of systems effectiveness at selected commands or geographic areas."

The methods developed in reference E-5 also included techniques for (1) aggregating results from different commands into results for combinations of those commands and (2) estimating confidence intervals for the results from the Markov models. The following discussion of the Markov model is based on references E-4 and E-5.

#### Description of the Model

The Markov model consists of a family of matrices and vectors that are based on sample data. The first--and most important--of these is the matrix of transition probabilities, or simply transition matrix, Q given by:<sup>1</sup>

$$\underline{Q} = \begin{pmatrix} P_{11} & P_{12} & \dots & P_{1j} \\ P_{21} & P_{22} & \dots & P_{2j} \\ \vdots & \vdots & \ddots & \vdots \\ P_{i1} & P_{i2} & \dots & P_{ij} \end{pmatrix}$$

where  $P_{ij}$  is the probability of a transition by a data element

from transient state  $i$  to transient state  $j$ , given that it reaches state  $i$ . Transient states correspond to nodes through which data elements are processed. They are occupied only temporarily (i.e., for a finite time), after which the data element moves to the next state. Absorbing states, on the other hand, if entered, are never left. They are data loss states. Once a data element is lost, it cannot be processed further. The absorption matrix R is given by:

$$\underline{R} = \begin{pmatrix} P_{11} & P_{12} & \dots & P_{1k} \\ P_{21} & P_{22} & \dots & P_{2k} \\ \vdots & \vdots & \ddots & \vdots \\ P_{i1} & P_{i2} & \dots & P_{ik} \end{pmatrix}$$

<sup>1</sup>

The underscore "\_" will be used to denote a matrix or a vector.

where  $P_{ik}$  is the probability of a direct (i.e., one-step) transition from transient state  $i$  to an absorbing state  $k$ .

If a data element starts in transient state  $i$ , the expected number of times it will pass through transient state  $j$  (before absorption) is given by:

$$\underline{N} = (\underline{I} - \underline{Q})^{-1} = \begin{pmatrix} N_{11} & N_{12} & \cdots & N_{1j} \\ N_{21} & N_{22} & \cdots & N_{2j} \\ \vdots & \vdots & \ddots & \vdots \\ N_{i1} & N_{i2} & \cdots & N_{ij} \end{pmatrix}$$

where  $\underline{I}$  is the identity matrix. The probability that the data element will go to transient state  $j$  at least once, starting from state  $i$ , is given by:

$$\underline{H} = (\underline{N} - \underline{I}) \underline{N}_d^{-1} = \begin{pmatrix} H_{11} & H_{12} & \cdots & H_{1j} \\ H_{21} & H_{22} & \cdots & H_{2j} \\ \vdots & \vdots & \ddots & \vdots \\ H_{i1} & H_{i2} & \cdots & H_{ij} \end{pmatrix}$$

where  $\underline{N}_d$  is a diagonal matrix formed from the diagonal elements of  $\underline{N}$ .

For a data element that starts in transient state  $i$ , the probability that it will terminate in absorbing state  $k$  is given by:

$$\underline{B} = (\underline{I} - \underline{Q})^{-1} \underline{R} = \begin{pmatrix} B_{11} & B_{12} & \cdots & B_{1k} \\ B_{21} & B_{22} & \cdots & B_{2k} \\ \vdots & \vdots & \ddots & \vdots \\ B_{i1} & B_{i2} & \cdots & B_{ik} \end{pmatrix}$$

The expected number of times that such a data element (i.e., one that starts at  $i$  and is absorbed at  $k$ ) will pass through an intermediate transient state  $j$ , is given by:

$$\underline{M}_k = \underline{D}_k^{-1} \underline{N} \underline{D}_k = \begin{pmatrix} M_{11} & M_{12} & \dots & M_{1j} \\ M_{21} & M_{22} & \dots & M_{2j} \\ \vdots & \vdots & \ddots & \vdots \\ M_{i1} & M_{i2} & \dots & M_{ij} \end{pmatrix}$$

Where  $\underline{D}_k$  is a diagonal matrix whose elements are the probability that a data element terminates in state  $k$ , given that it started in state  $i$ . Thus  $\underline{D}_k$  is formed from the  $k^{\text{th}}$  column of matrix  $\underline{B}$ :

$$\underline{D}_k = \begin{pmatrix} B_{1k} & 0 & \dots & 0 \\ 0 & B_{2k} & \dots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \dots & B_{ik} \end{pmatrix}$$

The total (mean) transition time for transitions between non-successive states may be calculated by first defining a vector of conditional transition times:

$$\underline{T} = \begin{pmatrix} t_1 \\ t_2 \\ \vdots \\ t_i \end{pmatrix}$$

Where  $t_i$  is the time for transition from state  $i$ , as previously defined. Now, given that a statement terminates in and absorbing state  $k$ , the expected time between its arrival at transient state  $i$  and its termination at state  $k$  is given by:



$$\underline{S}_k = \underline{M}_k \underline{T} = \begin{pmatrix} S_1 \\ S_2 \\ \vdots \\ S_i \end{pmatrix}$$

The expected time between the arrival of a data element at a transient state  $i$  and its arrival at any succeeding transient state  $j$  (given that  $N_{ij} = 0$ ) may be estimated by individually

treating the states  $j$  as though they were absorbing states. The vector of times for the transition between transient states  $i$  and  $j$  then becomes:

$$\underline{W}_j = \begin{pmatrix} W_1 \\ W_2 \\ \vdots \\ W_i \end{pmatrix}$$

#### COMPOSITE UNITS--AGGREGATE MARKOV CHAINS

The techniques described above apply only to basic sampling units. If we wish to combine units--regiments into a division, for example--then a new model is required for each such composite. The new model is formed by aggregating the Markov chains of the composite units. The aggregation methodology described below is from reference E-5.

#### Aggregation Methodology

If  $g$  represents a subgroup of the composite group  $G$ , the transition matrix for  $G$  may be written as:

$$\underline{Q}^G = \left( \sum_g f_g \underline{N}_g^d \right)^{-1} \left( \sum_g f_g \underline{N}_g^d \underline{Q}_g \right)$$

where  $\underline{N}_g^d$  is a diagonal matrix formed from the first row of

matrix  $\underline{N}$  for subgroup  $g$ , and the  $f$  are weighting factors for the subgroups of  $G$ . The weighting factors are based on the

assumption that a unit's relative contribution to the total volume of JUMPS/MMS processing is proportional to its share of the enlisted manning level. Similarly, the remaining vectors and matrices for the aggregate groups may be written as:

$$\underline{R}^G = \left( \sum_g f_g \underline{N}_g^d \right)^{-1} \left( \sum_g f_g \underline{N}_g^d \underline{R}_g \right) ,$$

$$\underline{N}^G = \left( \underline{I} - \underline{Q}^G \right)^{-1} ,$$

$$\underline{B}^G = \begin{pmatrix} \underline{N}^G & \underline{R}^G \end{pmatrix} ,$$

$$\underline{H}^G = \left( \underline{N}^G - \underline{I} \right) \left( \underline{N}_d^G \right)^{-1} ,$$

where  $\underline{N}_d^G$  is a diagonal matrix formed from the diagonal elements of  $\underline{N}^G$ ,

$$\underline{M}_k^G = \left( \underline{D}_k^G \right)^{-1} \underline{N}^G \left( \underline{D}_k^G \right) ,$$

where  $\underline{D}_k^G$  is a diagonal matrix formed from the  $k^{\text{th}}$  column of matrix  $\underline{B}^G$ ,

$$\underline{T}^G = \left( \sum_g f_g \underline{N}_g^d \right)^{-1} \left( \sum_g f_g \underline{N}_g^d \underline{T}_g \right) ,$$

$$\underline{S}_k^G = \underline{M}_k^G \underline{T}^G ,$$

and  $\underline{W}_j^G$  is obtained as before, by forming a modified  $\underline{S}$  - vector that treats the transient states  $j$  as though they were absorbing states  $k$ .

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